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SILVER JUBILEE
COMMEMORATION VOLUME

SILVER JUBILEE COMMEMORATION VOLUME

Editor

P. R. Damle

NOWROSJEE WADIA COLLEGE
POONA

Established 1932

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P R E F A C E

It gives me great pleasure to place in the hands of the reader the present Volume, which is the last of the Publications undertaken in connexion with the Silver Jubilee of the Nowrosjee Wadia College. Although the last in order of publication, the present publication, as the reader will appreciate, is an important and an appropriate one for the Silver Jubilee of a University Institution aspiring to do its little bit for the spread of knowledge. In planning it, the Publications Committee had two objectives in view. The first was, suitably and in a permanent manner, to associate some of the distinguished friends of the College and some of its teachers with the Silver Jubilee of the College. The second, with the co-operation of the contributors, was to offer to the reader varied non-technical material from persons of training and experience in their own fields, which would prove of interest and provide some food for thought. I am happy to say that our friends responded generously to our request for contributions to the Volume and have enabled us satisfactorily to attain our two-fold objective. On behalf of the Publications Committee and the College, I take this opportunity of conveying our sincere thanks to all these friends.

Nowrosjee Wadia College

Poona,

21st October, 1958

(Dussera, Shaka 1880)

P. R. Damle

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1

THE INFLUENCE OF INDIAN PHILOSOPHY ON ROMAIN ROLLAND

M. L. BALSÉ.

It must be admitted at the outset that Romain Rolland did not betake himself directly to the great sources of Indian Thought : the Vedas, the Upanishads, the Gita etc. He knew neither Sanskrit nor English and it was mainly through books in German and books in English translated to him in French that Romain Rolland initiated himself into Indian metaphysics. His ignorance of Sanskrit is undoubtedly the cause of his quarrel with the French Orientalists. He speaks with disdain of the eminent Sorbonne Professors who, in his opinion, "deciphered" Indian Books of Wisdom as philologists and archaeologists, as dead, fossilised material. They did not, thought Romain Rolland, plunge into the living and perennial fountains of Indian Thought. The Professors, on their part, accused Romain Rolland of having interpreted in a superficial, hasty, and therefore, imperfect manner the essence of Indian Philosophy. In their opinion, it was impossible to fathom Indian thought without direct contact with original books, and without knowledge of interpretations and commentaries of eminent men of the past and contemporary epochs. How glorious it would have been for the dissemination of Indian Philosophy if the ardent Romain Rolland and the erudite Paris scholars could have collaborated. It is a matter for regret that Poet Tagore, a great mutual friend of Romain Rolland and Sylvain Lévy, could not effect a reconciliation between the two.

As Romain Rolland knew German well, he began his quest of India by reading books on India by Germans such as Karl Eugen Neumann. But the greater part of his knowledge was derived from English sources. He toiled indefatigably and put in almost a superhuman effort in writing his books on India. We Indians will always be deeply grateful to him, all the more because he had to listen patiently to the French translation which his sister Miss Madeleine Rolland, happily alive today, made for his benefit every evening, of documents despatched irregularly and after painful delays by Indians. On one occasion he was so exasperated with our tardiness that he wrote petulantly in his Diary : "Ah, these Indians, they live in Eternity and forget the Present !" To form a correct estimate of the prodigious labours of Romain Rolland one has only to note the references in the foot-notes to an almost astronomical number of books he consulted.

He was not merely content with writing books on India, he let himself be influenced deeply by Indian thought, which coloured his personality, which moulded his mind and heart. At any rate, for a certain period, he lived and moved and had his being as it were in Indian Philosophy. It was his spiritual pabulum.

Let us attempt to retrace the stages by which Romain Rolland came to love India. The origin of the passionate interest that Romain Rolland displayed for India is to be found in his very being moulded (partially in any case) by Aryan thought. He himself affirms "I came from India along with my ancestors" and that he is assuredly the last scion of the Aryan vanguard that migrated from the plateaux of Asia. "As far as I am concerned" he writes to one of his correspondents—"I have not lost the memory of the chariot of the Migrations, which in days of yore brought us to Europe." He believed he was an Indian, born by some error in Europe. "A time will soon come", he asserted "when my soul will go in quest of its veritable milieu. For, I believe, that in this incarnation, I made a mistake about my home." His death in Asia, he thought, would crown a life spent in love of the Orient. "I shall not dread dying in Asia. I believe that that

would be a fitting end to my life."

Let us come to more precise indications. In this book, published recently, "Le Cloître de la rue d'Ulm" we can already discern tendencies which predisposed Romain Rolland to like India eventually. He was then just a stripling. Since his boyhood there lurked in him mystic traits almost Indian in their texture. He thinks often of religious trances in the manner of Indian rishis. "I have a tendency towards hypnotic ecstasies" he writes "either through the organ of hearing or that of sight" and he even speaks of the "extasies of fakirs."

At the beginning Romain Rolland is drawn to Buddhism. His comrades of the famous Higher Normal School call him in fact, "the musical Buddha of revolutionary mysticism." His Buddhistic leanings become more pronounced after a visit he pays to the Musée Guimet at the age of twenty. The dominant impression left on his mind by his visit is that of "the unity of the human spirit."

Romain Rolland's first contact with India according to the oral testimony of his sister, occurred in his seventeenth year. He lighted by chance, on the book "Les Deux Masques" ("The Two Masks") by Paul de Saint-Victor in which the author has devoted a chapter to Kalidasa's "Shakuntala" which at once roused Romain Rolland's enthusiasm for India. However, it was only when he was 49 years old (1915) that he read the Bhagavadgita in English and the book, "The Arts and Crafts of India" by Dr. Ananda Coomaraswamy. He wrote immediately in his Diary : "This universe is too rich, too full, my heart is bursting." In 1916 a speech by Poet Tagore at Tokyo condemning war and nationalism provided the starting point for the intimate friendship that sprung up between the two and eventually led Romain Rolland to Ramakrishna and Vivekananda. At that period his book "*Au-dessus de la Mélée*" had made him the victim of violent attacks by his countrymen and Tagore came forward as his only supporter and ally.

How did it come about that Romain Rolland swerved away from Buddhism towards the study of Vedanta ? In my opinion, this was because of his contact with certain Bengalis

such as Tagore, Shri. Dilip Kumar Roy, Shri. Kalidas Nag and especially Aurobindo and Dhan Gopal Mukerjee. The last was an ardent disciple of Vivekananda, and in the French author's opinion a highly gifted, and an extraordinary person in matters spiritual. Shri Roy on a visit to Romain Rolland in 1922 finds on the shelves of the French author's library, 'several books on Buddhism... and the Gita and the Upanishads.' Persecuted in Europe Romain Rolland turned towards India. He writes to Tagore in 1923 : "India for me is a vaster country, where my limbs are liberated from the bonds which bruised them in fanatical Europe."

Here is a list of his readings for the period September 1923—March 1924 : "Comparative Philosophy" and "Sketch of a History of Indian Philosophy" by Prof. Masson-Oursel, "Classics of the Orient", "Arthashastra" (a doctorate thesis by Dr. K. Nag), "Indian Studies" by his friend José Vasconcelos, on Shankara, Ramanuja, the Upanishads, the Atharva Veda etc.

In 1922, the perusal of a collection of articles by Mahatma Gandhi roused his enthusiasm for the philosophy of non-violence. At that epoch his tortured and uncertain mind found itself in an impasse. He glimpsed no outlet in a Europe caught in a tragic situation in the post-war period. "It is then", he confesses, "that I saw springing up from the plains of the Indus, the Citadel of the Soul that the frail and unbreakable Mahatma had built, and I endeavoured to reconstruct it in Europe.....He had placed on it the seal of a lived life—the world was tired of bookish virtues—of a pure and heroic life".

In his book on Mahatma Gandhi (1923), Romain Rolland bestows warm and ringing praise on Gandhism, on Satyagraha which, in his opinion, places extraordinary stress on religious heroism, on the gospel of non-violence and love of the enemy which he felt constituted an irresistible propaganda. "By it the Cross of Christ and his little flock has conquered the Empire".

The Gandhian movement interested Romain Rolland by its permanent features and international implications. He considered the Mahatma as the incarnation of great moral

and spiritual forces existing latently in India. However, India's salvation was not for her alone, Gandhi's India has brought "the predestined reply for which the world was waiting", and Gandhism "brought to exhausted Europe, a new viaticum".

In Europe, Force reigned supreme. The spirit of pacifism was either non-existing or at least lifeless and the Frenchman was convinced that the West could be saved only by the ancient message proclaimed loudly again by Mahatma Gandhi, the message of self-sacrifice and non-Violence, not non-violence of the weak, but of the strong. He felt certain that even if the Mahatma did not triumph, India would bring forth another Messiah who "would lead to a new stage, a new humanity." Unfortunately alas ! in the years that followed and before the growing violence in Europe, Romain Rolland's faith in non-violence was to change and almost disappear.

The Mahatma fascinated Romain Rolland in two ways, by his character and by his doctrine of non-violence. He calls him by several names : Socrates, Saint Dominic, Saint Francis, Christ. He says somewhere : "Gandhi's personality is without an equal in the world today". "A Gandhi is much more than a great Indian, his personality has a universal value." He discovered in the Mahatma a unique harmony of moral genius and genius of action. "Without appearing to touch anything, Gandhi utters words which change the face of the world".

In some ways, the Mahatma exercised greater influence on Romain Rolland more continuously and for a greater length of time (from 1922 to 1939 and probably upto the death of Romain Rolland) than any other Indian be he Tagore, Ramakrishna or even Vivekananda. He was captivated by what he called Mahatma Gandhi's "alchemy of love." The dominant trait in the Mahatma's character which strikes his friend is his indefatigable search for Truth, which existed for the Mahatma concretely, almost imperiously. Truth, believes Romain Rolland, was Mahatma's *raison d' etre*, it was inscribed in the very depths of his being. The Mahatma pursued Truth by slow and logical experimentation, by action. He was not a mystic, but Romain Rolland believed his system was no

less important than that of a mystic as Romain Rolland himself was a man of action (in his thinking, if not in practice). On occasions, Romain Rolland appears to prefer Ramakrishna's system which according to him takes one further, although it is beset by more perils and he also loved the impetuosity, the inflamed imagination and energy of Vivekananda. Nonetheless, he acknowledges all the value of the Gandhian method, through it the Mahatma resembled the Westerners and appealed to them. He utilised the best instrument, "intelligence which serves, which deduces and which applies to the facts of experience the results of his reasoned experimentation". And as the Mahatma was an experimentalist Romain Rolland considered his mind as being always on the march. "He is in constant evolution", writes the Frenchman, "nothing frozen, nothing static in him." This trait delights him and he attempted in vain to make the Mahatma share his love for Communist Russia.

What attaches Romain Rolland to the Gandhian philosophy is the fact that the continuous movement of Mahatma Gandhi's mind led him from the formula "God is Truth" to the one that "Truth is God" which included in Romain Rolland's opinion the sincere atheist and the man of science, formula of universalism of Vivekananda. In fact, Romain Rolland believed that the three great Indians, Ramakrishna, Vivekananda and the Mahatma composed the trinity of Indian mysticism and were complementary to each other. "I have discerned," he writes "in Ramakrishna a great lesson which Vivekananda has tried to codify and which loyal Gandhi is endeavouring to put into practice."

The Mahatma's yoga according to him was "a moral yoga". However, his asceticism did not drive him to withdraw like a coward from the world, as do so many ascetics; and the European appreciates this highly. The Mahatma tried to discover Truth which lay within him, by his love for his people, by living among them, by mingling with them. "By the hammer and chisel of his acts he disengaged from the block the statue inscribed in his own being." Romain Rolland admired above all the Mahatma's sincerity, his profound and touching humility.

"What insatiable passion in him for self-abnegation. He wanted to reduce himself to zero, attain the limit of that zero which is Universal Being, Absolute Moksha."

Let us briefly indicate the precise way in which Gandhiji's philosophy of Non-Violence influenced Romain Rolland. In 1923, in his book on Mahatma Gandhi he affirmed that he would believe in Non-Violence, even if he were the sole person in Europe to do so. However, even at that date, (he declares in 1934), he had in view the Russian Revolution which he wanted to help maintain itself, if possible by the weapon of Non-Violence. It appears that the Gandhian Non-Violence won his suffrage because it represented "paroxysm of action", it contained a very powerful element of combat, it was "the sword of self-sacrifice" the triumph of which was absolutely certain.

It was identical with Spinoza's maxim which Romain Rolland had adopted as his life motto : "peace is not absence of war. It is virtue which is born of the soul's vigour". In other words, one must fight with all the vigour of one's soul against conditions which bring about wars. Therefore, "the peace which he proclaimed in the name of the Mahatma, was that of the heroes." He will follow the Mahatma's example, he will not turn his back on politics, but like "the Master of Soul and Action, Gandhi, he will endeavour to realize the harmony of both."

He regretted he was not able to unite the two important wings of Revolution : Gandhism and Russian Communism. His failure he believed was rooted in the intransigence of the two credos which refused to admit that each was an experimentation and not an immutable dogma of absolute value. He prided himself on being "a Western Doubter" whose mission was to reconcile all systems violent and nonviolent, which tend to converge each from different directions, towards the same goal : the welfare and happiness of humanity.

He made all the above statements in the year 1934. Even if we admit that in 1923 such ideas did spring in his mind, he has not formulated them in a categorical and precise manner. On the contrary, upto the year 1927 he condemns violence uncompromisingly. It is true that in 1924 he did

aver that Non-Violence is as powerful as Violence. Indeed, the Mahatma has declared that it is infinitely more powerful than Violence. But this in no way means that Non-Violence is only Violence camouflaged, nor that the two can march side by side.

Romain Rolland allowed himself to be obsessed, after about 1927 by his extreme affection for the Russian Revolution to the point even of completely misunderstanding the fundamental, cardinal principles of Gandhism. At no moment of his life, as the whole world knows, the Mahatma compromised on the immutable, unadulterated principle of pure Non-Violence. Romain Rolland on the other hand oscillates, during the years 1927-1933, between Violence and Non-Violence. Alternately he commends one or the other. In 1924, he wrote : "The Civitas Dei, the City of Non-Violence and Human Fraternity must refuse (to join) any alliance, shun every compromise with the violent people of all classes and all parties." The novel "Enchanted Soul" so largely influenced by his contact with India contains all the stages of the march forward, the frequent retreats, the hesitations of Romain Rolland unconsciously advancing towards Violence.

In 1931 he discarded Non-Violence completely as a political weapon for solving urgent world problems. "We cannot recommend nor practise the doctrine of Gandhi whatever be our respect for it. It appears to us that it is called upon to play in the world the role of the famous monasteries of the Mediaeval Ages of Christianity, in which was preserved, as an islet in the centre of a stormy ocean, the purest treasure of moral civilisation, the spirit of peace and love, the serenity of the spirit....." Personally, however, he will practise "the Gandhian Refusal" and in a letter he assures the Mahatma "As far as I am concerned personally, I shall never practise Violence, neither to attack nor to defend myself". Strangely enough, this European with dual personality in this his almost final utterance on Gandhism recommends it (violence) to all others who have the courage to adopt the same, and especially to the oppressed of the world, and he does it out of love for humanity. This great sentimental European, it must be confessed, if he

strays into Violence it is because this passionate humanitarian cannot endure the heart-rending spectacle of human suffering. He has stated : " Were I to witness the sufferings of one single innocent victim the most magnificent social order would not be capable of making me forget or pardon them ".

After being inspired by Gandhism, Romain Rolland tried to go back to the eternal sources of Indian Thought two main principles of which the Mahatma represented : Non-Violence and Universalism. One would make a grievous mistake if one believed, as many in France do, that Romain Rolland plunged into the Orient to forget Europe. It was his great aim to unite the East and the West. The Mahatma, according to him, had constituted himself the connecting link between the two, inspired as he was by the New Testament and the secular thought of Europe, thought which " Gandhi refurbished, renewed, recreated in the burning oven of his reasoned action." And in the Gandhian action against the British Romain Rolland found no widening, yawning abyss between the East and the West but " the Sposalizio (Espousal) between two great halves of humanity. They are being affianced. The two streams of the Mind are meeting finally and are mingling their waters."

The question arises why did not Romain Rolland quench his thirst for Indian Thought at the very fountain-head, why did he not expound directly the teachings of the Indian Scriptures? It is because, in my opinion, Romain Rolland never loved to compose abstract, academic, philosophical studies. He was essentially a preacher, a missionary. He, therefore, sought fictitious, or real personalities (contemporary, if possible) around whom he co-ordinated and wove his own philosophical system. Luckily, he discovered two perfect men Ramakrishna and Vivekananda, supermen, " Men-Gods ", as he called them (" Hommes-Dieux "), and contemporaries in the bargain, who sum up and incarnate all Indian Thought. He went straight to them as he had gone straight to the Mahatma. He chose them as he explains, because, " It is they who come to us (The Europeans). Gandhi and Vivekananda, in spite of their essence of ancient India, have borrowed

much from the West. We recognize ourselves in them."

In the period immediately preceding 'the discovery' by Romain Rolland of the two Indian Sages (1922-1927) his mind was in a state of uncertainty and he was conducting a passionate and searching examination of his tormented life. He felt a storm brewing, against which bastions had to be built for the safeguarding of European culture. He then came to hear about the Indian saints whose teachings he felt would contain directives to the European masses how to neutralize the imminent storm. As he penetrated into Indian Thought he was surprised to discover that it had familiar features, family traits of European Thought. Soon he was led to believe that his soul, hence every soul, is the microcosm of all the souls and contains the Universe. He begins to believe firmly that he is, like any other Indian, the inheritor of the thousands of years old Indian Thought. "My brain and my heart could have created," he wrote, "the great metaphysical dreams and the poetic visions of Aryan Brahmanism". He believes in the great Unity that binds Humanity. He claims that all his thoughts are impregnated with Indian Thought and that in his book he is returning to the Indians what came from the distant descendants of their race. "There is for the naked soul, neither West nor East, they are its vestments. The world is its abode." In his opinion, no other system of thought except the Indian recognises and embraces this fundamental unity of humanity, indeed of the very Universe. Indian thought is vast, comprehensive, excludes nothing harmonises everything, neither hates nor vilifies other systems which are in fact already blended in itself. Finally, what is more important, according to him, is that Indian thought makes room for new creations of man which it welcomes and finally assimilates with extraordinary suppleness. "Amongst all the systems of Europe and Asia, the religion of Brahmanic India appears to me, to embrace the largest portion of the universe." He loves it above all because it is in accord with the vast hypotheses of modern science. "Indian Thought, he writes, unites in a perfect harmony and symphony ever so many diverse notes—sweet tunes and discordant strains."

As against this, the cold Reason of Europe tends to disassociate what is not similar. For the European "Truth, is myself" while in Indian Thought "Everything is Truth". He considered Indian Thought perfectly capable of satisfying all the spiritual hunger of the contemporary world.

Romain Rolland believed that he was destined to be the connecting link between East and West, the arch that would join these two worlds mistrustful of each other, fastening on the superficial differences that separate them. He has stripped himself of all prejudices, has descended into the innermost recesses of his own heart where he has discerned UNITY. He thinks he is capable of passing unfalteringly, without stumbling, from Western thought to the Eastern, from the remotest antiquity to the coming centuries. He is the citizen of the World—of the *Civitas Dei* and the City of Time. Never will he tire but will pursue upto the ocean "the river of God and without halting on the way he will embrace the River, its tributaries, small and big, and the Ocean—all the moving Mass of living God." It is in this spirit that he assumes the task of exploring Indian Metaphysics. He attempted to investigate to what regions in Europe and America Indian Thought had percolated. With delight he notices that Schopenhauer, Spinoza, Beethoven, Goethe, Michelet, and the Americans Thoreau and Emerson were all influenced by Indian Philosophy. Walt Whitman discovered by intuition, thinks Romain Rolland, Vedantic Philosophy in his own heart. Whitman's case and his own example prompt him to believe that "the Vedantic predisposition in America is..... a universal disposition of the human soul, in all countries and in all times." It exists in the depths of all great artists, including, needless to state, in the heart of Romain Rolland himself.

However, Romain Rolland does not wish that Europe should be submerged by the flood-tides of Asia. He will remain a European armed with his critical faculty, but free from prejudices and preconceived notions, while refusing on the other hand to be blinded by the light streaming from India. All this sounds quite strange in a virtual votary of Vedantic

philosophy. He was always ultra-sensitive, very chary of being drawn into any alignments, passionately desirous of remaining on the lofty pinnacle of his personal independence. He endeavoured to keep himself "above all mêlée" whether political or spiritual. He respected too greatly the liberty and the individuality of each human being to try to convert human beings and to herd them under one label. Nevertheless he was firmly convinced, 'Unity did exist.' Here is what he writes to a friend : "I was, I have remained profoundly a European. I have abdicated nothing of my European nature. But I perceived it completed itself, became entire by following in the ways of these free spirits of India (viz. Ramakrishna, Vivekananda, Mahatma Gandhi)". In the deepest strata the thoughts of Europe and Asia meet and thus his voyage to spiritual India was only a return to Great Europe—"a complete periplus".

As in his case, so in that of Europe—which cannot complete itself, rediscover its integrity, except by assimilating Indian Thought. A serious disequilibrium has taken place, says Romain Rolland, in the European civilisation which has developed disproportionately its head at the expense of other fundamental faculties. Tagore likened Europe to a giraffe. The Europeans would learn from Indian thought "all that the soul of Europe has the greatest need of today : calmness, patience, virile hope, serene joy, like a 'lamp in a windless place', which does not flicker", as the Gita describes it.

Europe, opines Romain Rolland, pursues immediate, restricted aims, realisable early. And when her dreams scatter away in smoke she is overwhelmed by a cruel disappointment, while "the great Brahmanic Thought does not know these ups and downs of the balance". It marches serenely towards Eternity, gathering into itself on the way all terrestrial desires. Inorder to find a true refuge, the European mind staggering under severe ordeals could do nothing better than have recourse to "this world of concentrated soul, this intangible treasure of millions of souls of the Orient."

However, Romain Rolland is far from insinuating that Europe has become spiritually bankrupt. Only she is not

greatly attached to her spiritual forces. "France, hence Europe", he writes "is rich in souls. But this old peasant woman (France,) hides them as she hides her money." The Europeans must rediscover and bring to light these sublime souls. Europe's spirituality is hidden under the philosophy of her external action but always feeds European souls with her ardent and inextinguishable fire. Let people make no mistake. If this spirituality remains silent, masked by "the frenzy of enjoyment and power," superficial and evanescent, at bottom is hidden, in the words of Romain Rolland "an unsullied treasure of self-abnegation, sacrifice, faith in the spirit." Similarly, one must have "confidence in the destinies of India, this India which is slumbering now, but whose powerful soul will spread out over the whole world." The spiritual memories of Europe will also be rekindled "by contact with the spirit of resuscitated India."

By his books on Indian mysticism, he declares, both Indians and Europeans will profit. The Indians will be struck by the resemblances, nay by the identity which he establishes between the renowned Indian mysticism and that of Europe. As regards moribund Europe, spiritually moribund that is to say, Romain Rolland "will rub on her lips the blood of Immortality." But let it be well understood that each man preserves his faith. His books will only, as Swami Shivananda affirmed, "make the Christian more Christian, the Mahomedan more Mahomedan and the Hindu more Hindu" and adds Romain Rolland "the free-thinker more truly free and that they will all acknowledge each other as the equal sons of the same Mother." His books will serve as powerful stimulants, he hoped, to liberate and to send forth gushing "the Stream which is in the heart of each one of us", and thus also is in each one of us our own Salvation which we will not find "either at Rome or at Belur." How to convince Europe of the necessity of drinking deep at the fountain of Indian Philosophy which she wrongly considers as passive? Europe prizes above all, action, energy--admirable gifts, desirable gifts, especially for a country like India. Romain Rolland will demonstrate by the example of his

Indian heroes how action can be allied to the highest spirituality. He is bringing from India he writes "not the motionless drama of the Infinite in which Indian thought is consumed away but those who were able to extract from the Dream, Energy, which they threw in the melting-pot where were accumulating and seething the ores of Action : Gandhi, the supporter of the masses and the hero Vivekananda". All his Indian Heroes not only preach but incarnate activity.

Above every one else Romain Rolland loved the "poverello" Ramakrishna, in whom he saw another Christ, whose heart overflowed with deep powerful and tender love. He loved almost equally well Vivekananda "because both have realised with incomparable charm and powerfulness that splendid symphony of Universal Soul." It is indeed difficult to state precisely whom he venerated more. He professed equal esteem for both, but in a different manner : "I look upon Swami Vivekananda as a Furnace of spiritual Energy, and on Ramakrishna as a River of Love. Both radiate God and Eternal Life. And the greatest genius is Vivekananda. But Ramakrishna is above all genius."

Ramakrishna had been preceded by or he was a contemporary of some great religious figures in India who had stamped modern Indian civilisation with their indelible imprint. Their names are : Raja Ram Mohan Roy, Debendranath, father of Poet Tagore, Keshab Chander Sen, Dayananda Saraswaty, whom Romain Rolland calls "the builders of unity." All of them brought to the common task the overflowing wealth of their souls and forged either directly or indirectly unity not only of India but also of the East and the West. They constitute in the words of Romain Rolland "a magnificent avenue of Heroes of the Mind." He searches in the tenets of each one of them the influences of the West and throws light on the synthesis they achieved of the Eastern and Western systems of thinking.

And what about Ramakrishna? His predecessors and contemporaries did not realize unity in the same absolute and comprehensive manner of Ramakrishna who was the only saint destined, in Romain Rolland's opinion, to realise cosmic

unity. That is why Romain Rolland "dedicates to him his love..... and draws from him a little quantity of his sacred water in order to quench the great thirst of the world" as well as his own. His own thought is identical with that of Ramakrishna. He writes in a letter "author Romain Rolland has perhaps in this book (on Ramakrishna) divulged more of his own religious and metaphysical thought than in any other of his books."

The life of Ramakrishna is a veritable epic and Romain Rolland traces it lovingly from the first ecstasy to the last one in the bosom of the Infinite. What a gripping account does he give of all the stages that superhuman being Ramakrishna traverses in his pilgrimage towards God through the means of all the Sadhanas. Having attained the radiant pinnacle of the highest spiritual realisation, Remakrishna dominated the universe for a while and saw over the expanse of the Universe nothing but unity, all-embracing unity which his biographer admired so much. What Romain Rolland appreciates most is that on the practical plane Ramakrishna sought this unity in all the religions which he embraces in turn and discovers ultimately that all converge in God, the Centre. As his biographer, Romain Rolland loved Ramakrishna's humility, his modesty, his simplicity, his openness of mind. Ramakrishna preached that one must not flee the world and Reality with which, in fact, it is every one's duty to identify and unite oneself. These teachings of Ramakrishna, says Romain Rolland, find their echo in those of the "free spirits of the West" (of whom Romain Rolland himself is one). For "is it not our desire, which sooner or later will be realised, to unite the races and the religions? And are we not in this, the disciples (who may not know that they are such) of Ramakrishna?" Ramakrishna represents the hero par excellence, the hero after the heart of Romain Rolland, the hero who unites in himself in a splendid synthesis all the qualities of which only some are manifest in other heroes. Ramakrishna was at once man and superman, a contemplative sage and a man of action, of this world as of the next, he embraced everything in the wide sweep of his mind, united

everything, understood everything, loved everything in joy and with energy, was moved by the sufferings of human beings, acknowledged everybody's liberty, was a unique Guru, modest, kind and merciful, tolerant, chaste, saintly and also artistic, in short the most exaltingly Universal man, a Man-God. So says Romain Rolland, and everybody else.

I shall now come to Vivekananda. "This volcano of energy" in whom Ramakrishna himself recognised his Master as also did Romain Rolland who willingly believes that "Vivekananda was projected into the century by the very parturition of Nature." He was truly, says Romain Rolland, a superman, an exceptional being, majestic, wielder of formidable powers, "a Napoleon of spiritual forces..... a Gargantua, the anointed of the Lord, a man marked with the seal of Force which rules over men." In his heart, gigantic battles took place of which Romain Rolland gives impressive accounts, battles between two equally imperious desires, domination and renunciation. Neither won the victory which went to a third desire, the desire to serve humanity.

Romain Rolland notes with transports of delight that Vivekananda welcomed with great open-mindedness scientific, democratic and social contributions of the West and especially its spiritual contribution as represented by Christ's gospel which he attempted to disseminate in India. As his biographer Romain Rolland also remarks eulogistically that Vivekananada "made of sterner stuff than Tagore or Gandhi" did not find repellent the strident machine civilisation of America, of which he feels the exciting intoxication. Vivekananda, like Romain Rolland, sees the salvation of the world, only in the intimate union, in the untrammelled interpenetration of the organised materialism of the West and the high spirituality of the East. No one was better qualified and able than Vivekananda, in his biographer's opinion, to draw up the plan of such a union. Romain Rolland is so dazzled, so impressed by the thunder-like eloquence of Vivekananda that even at this distance of time, he confesses, he receives "an electric shock" on reading his speeches.

Vivekananda's Gospel of Energy wins the unbounded

admiration of Romain Rolland who writes : "Vivekananda has kissed the face of Death itself". Vivekananda invites us to worship God even in His most redoubtable manifestations—in Cataclysms, and in the excruciating suffering and pain God inflicts on us. What limitless 'voluptuousness' and what unbounded understanding of God ! And Romain Rolland comments approvingly : "We shall find here, at its paroxysm the heroic will-power, which is the very soul of all actions of Vivekananda." Romain Rolland sees in Vivekananda a personality that answers all the modern needs of Europe, in any case his own. It is because Vivekananda "has realised the highest equilibrium of modern man between the forces of Thought" and that he has succeeded in harmonising Reason and Faith. He is also the most impetuous, the most tumultuous lover of liberty Romain Rolland has ever come across. He is the one who proposes this Upanishadic solution to the mystery of the universe. "In Liberty it is born. In Liberty it lives. In Liberty, it vanishes or is reabsorbed."

The highest teachings of Vivekananda are found concentrated in his expounding of the four Yogas which Romain Rolland in his turn interprets for the benefit of Europe. He begins by warning the European reader that the Yogas are a rigorously scientific discipline, proved in the Western manner by experimentation and are subject to the control of Reason. Only they go further, beyond the sphere of intelligence. Of the four Yogas, Romain Rolland considers Karmayoga the best—the Gospel of work—because it is in conformity with the European temperament : to remain in the world and work in it for the good of humanity with sincere disinterestedness and self-sacrifice. Western religious souls have practised it and what else do those others do, the serious and industrious workers like himself in Europe?

He sees in Vivekananda's religion a synthesis so vast that it comprises and embraces all the speculations of the human Mind. "Religion for Vivekananda," writes his biographer, "is synonymous with universalism of the mind." The great problem for him as for Romain Rolland is 'to accord', to forge an alliance between Religion and Western Science which

has acquired its citizenship rights and can no longer be dislodged. This alliance, in the opinion of Romain Rolland, can be effected only by Advaita, "the only religion that can capture the minds of the great intellectuals."

The magnificent result of his books on India were manifest, believed Romain Rolland in the awakening which they effected of the religious sentiment in Europe. Letters poured into his house. Many Europeans confessed to him that the thoughts of the two great Indian Men-Gods accorded with their own thoughts, not that unwittingly they were objects of "infiltrations of the Indian mind", but because these thoughts are thoughts natural to man, because the two fundamental Vedic principles : Divinity of man and the essential spirituality of Life, are equally at the basis of Western beliefs. For indeed, All is Unity.

2

PANCHAYETS IN MARATHA ADMINISTRATION

R. D. CHOKSEY

Our source of information on the panchayets under the Peshwas is the elaborate questionnaire sent out by Mountstuart Elphinstone to the several Collectors in the Bombay Deccan in 1819. To enumerate the replies, or even summarise, the information supplied by the collectors is beyond our scope. But we may very briefly give here in outline the working of the panchayets as found by the British on their occupation of Maharashtra.

The replies to the questionnaire elucidate the methods of the constitution of the panchayets, the presiding authority, the attendance of members, the calling of witnesses, the declaration of the award, the nature of the decrees, the procedure for allowing appeals this and such other information give a full picture of an institution of which Elphinstone thought very highly. But the most outstanding feature of this voluminous evidence is the revelation that the village panchayets, as such, did not attend to any other matters than judicial functions. Really there were two different forms of panchayets for village government, the one being the panchayet selected to arbitrate in disputes, and the other the hereditary council of representatives which was to attend to certain other matters in the village, but which had almost fallen into decay by 1817. The panchayet with which we are concerned was solely a jury agreed upon by both parties in a dispute and which automatically dissolved when the case was concluded.

As far as petty cases were concerned, the parties in the rural areas usually referred the matter to the local judicial officer of the government, who in theory at least settled it at once. But if the case was intricate or if it involved a large sum of money, it was always referred by the mamlatdar to a panchayet. It must be mentioned that all wise local officers appear to have referred every case to a panchayet when no other mode of adjustment seemed likely to satisfy the parties.

The most common method of constituting a panchayet was to ask the parties to name a certain number of persons, and appoint a government Karkun to superintend the proceedings. Government had the right of sanction and confirmation to ensure (at least in theory) that those who sat on the panchayet were "the most respectable people, and men of good sense and probity". There were no set regulations as to how a panchayet was to proceed beyond the general observance of the rules of the shastras and the established customs of the country. As a general rule, every litigants' panchayet was composed of persons of his own caste, trade or situation and no caste was barred or exempted.

Village panchayets were always assembled by the patil of the village, under special instruction from the mamlatdar, the patil had no actual judicial authority. The membership to a panchayet was open to all except the regular out-castes. Patils were frequently members. The tendency was to select men who were reasonably well acquainted with life and who understood human nature well. Once the panchayet was assembled the umpire or president was nominated by the local government officer. If the government was involved in the case then all the members were usually selected officially. If a party to a case refused this mode of settling the dispute, government would compel the party to abide by the decision of the panchayet.

The president or umpire was not as a rule a government officer. All members including the president were bound to vote. In matters of doubt or a question concerning religion the president or government would call for the opinion of a shastri. His decision was generally accepted.

It was very unusual for the shastri to sit in a panchayet as an ordinary member, though there was no rule to the contrary. No man was obliged to be a member of a panchayet although when frivolous and idle excuses were produced the attendance was insisted upon. Once a man agreed to serve on a panchayet, attendance to the end was obligatory. If, a man deliberately refused to attend he was liable to a fine.

A panchayet was not considered fair unless the parties concerned were allowed to challenge members as well as to appoint or approve of them, such right of challenge being even extended to the first half of the actual proceedings. There is nothing on record to show that corrupt members were either fined or punished. Mr. Chaplin was of opinion "that corruption was not considered criminal but was at best a venial fault for which in practice, no punishment was inflicted".

Serving on a panchayet was to a certain extent optional. When summoned as a witness attendance was compulsory. The plaintiff and the defendant frequently brought their witnesses. Before giving evidence well known men and even common people were seldom required to take an oath. Taking of oath, said Chaplin, was repugnant to Hindu prejudices and was forbidden by Hindu Law. It was only under the British that oaths came to be frequently administered because of a false belief that the natives were often given to perjury. There is evidence that under the Peshwas very little punishment was meted out for perjury. False evidence by disinterested witnesses was anything but common.

The actual conduct of the hearing was based on very simple and commonsense lines. The plaintiff stated his case, then the defendant's side of the question was taken down, and the witnesses on both sides examined, whilst later on the substance of the evidence, the arguments used, and the decision and reasons for the verdict were all fully detailed. All documents and vouchers were copied down, and every member of the panchayet signed the completed case. The cross-examination was conducted by the Karkuns, and since very few questions were asked, the taking of evidence was not laborious, the

confession or statement of the defendant and the prosecutor being the main guide to the panchayet.

Although there were no regular means adopted to expedite a decision, Briggs says "an application to the authorities resulted in sentries being placed over the panchayet to prevent members eating or drinking until they had reached a decision". The written award was always deposited with government in the district cutcherry if in rural areas, or in Poona itself if in the towns. In all cases the award received the formal sanction of the government.

The worst feature of the Maratha judicial administration was a lack of a regular code of laws. Pottinger wrote : "From all the evidence available, there does not seem any doubt that the Maratha practice frequently differed from the regular law". Explaining this Grant says that the Marathas undoubtedly adopted many of the customs which they found in the countries they conquered, but he adds that he could not find out the real difference between the Hindu law and the Maratha usage, "nor could a party of Shastrees assembled at Wai give me the information I sought for". Briggs was also of opinion that the Marathas adhered to no particular code "making expedience their doctrine and precedence (however unjust) their guide whenever it suited their convenience".

Appeals against the award of the panchaycts were allowed. The general course of proceeding was for the appellant to make an official application for revision, which was subject to any penalty government thought fit to impose, either by enhancement of the sentence or fine as a punishment for frivolous objection. Unjust appeals being always dealt with severely. When an appeal was made a new panchayet was appointed. Sentence was not suspended nor was any compensation given if the award was reversed. There do not seem to be any instances of an appeal against the decision of an appellate panchayet nor any higher court of appeal unless perhaps the Ministers at Poona could be approached and persuaded to intervene.

In the village, the judgment was enforced by the Patil. The successful received the award. The person who lost the

case seldom gave any opposition for fear of personal violence. The award was executed by the party who won the case.

There were no fixed fees in connection with membership on the panchayet. But members took money from both the parties, which, if given in a just cause, was allowed. But in all cases the expenses of the members were paid, usually by the losing party. Government stood to gain both from the plaintiff and the defendant. The party which won, paid *hurkee* (or joy money) while the loser paid a fine called *gonhagaree*. In petty cases, the government took nothing; but when a large estate was involved the complainant, on filing a suit, paid a *nazarana*, which was about one quarter of the value of the whole property. One outstanding feature of the old system was the complete absence of pleaders.

Grant, at one time, considered the panchayets as unpopular, later admitted that he was prejudiced. His final verdict reads : "the old rule of the country, which if well acted up to, would be a grand arm against injustice and oppression. However much better our system may be, yet if the opinion of the country is so much in favour of panchayets, it would be impolitic to attempt any radical alterations". Chaplin was also convinced of their popularity and usefulness : "there is no doubt there has been fairness and intelligence used in the conduct of panchayet that evidence is weighed and considered, and that exhibits are duly examined and compared, and that the decree in plurality of cases is just and impartial". Mr. Thackeray wrote from the Southern Maratha Country : "The public opinion of the panchayets must be very favourable as it is this opinion that has made them so popular for so many ages."

As far as can be ascertained from the scattered and fragmentary documents relating to criminal justice, panchayets are frequently assembled by the local officer in cases which for certain reason, he decided not to try himself. Criminal justice was theoretically administered by government alone, a special officer being appointed in large towns to take cognisance of all crime and to inflict punishments, whilst in the districts that power was given to the revenue officers. Under the last Peshwa even the farmers of revenue and their servants were

given the right of punishing offences against the regular law. With the exception of the extreme penalty of the law, which rested with the Peshwa or his district officer (*Sirsubedar*) all other officers had the right in general to inflict only punishments short of death. Though criminal justice was neglected at the close of the Maratha rule, yet when the system of panchayets was revived later as a part of the British administration, it was found as suitable for criminal as for civil causes.

Panchayets were often consulted by the Government officials to help them not only as witnesses to the original statement of the accused but also for suggesting as to the name of the perpetrator of the crime or his whereabouts. Similarly patils also sought the advice of an unofficial panchayet, not on the question of the sentence but on the tracing of the crime and the fixing of the guilt. The activity of the panchayet and the police was an excellent check on unsocial conduct. At certain times social crimes like drunkenness, adultery etc., were tried by a synod of brahmins (*Wootura Sabha*), the powers of which were superior to those of the highest high priest (*Acharee*). When caste panchayet came to a decision on a criminal case no confirmation of their judgment was necessary. It was the wide power of the caste which was undoubtedly responsible for the keeping down of the social crimes. There was a public morality which survived all the evils of the time and kept ordinary crime down to a minimum.

Although the criminal justice of the Marathas was the worst of their institutions, the little good there was in its working was due to the fact that panchayets were used, either officially or unofficially and that it was the panchayet system which enabled a semblance of justice to be meted out.

Elphinstone and all his co-workers were deeply impressed with the panchayet system in the Bombay Deccan. There was not the slightest doubt that in theory the panchayet method of settling disputes in rural areas was far superior to the ordinary courts of justice. The system had considerable abuses but with the introduction of some reforms Elphinstone saw that this democratic approach to justice, practised since time

immemorial, was continued in the conquered territories of the Peshwa. All crimes, from murder to petty quarrels over a few rupees' loan came under the jurisdiction of the panchayet, of which it was officially said by British administrators, "the only semblance of justice in the Mahratta Empire was obtained by panchayets, for without them there was no justice at all, either for rich or poor, nor for important or trivial cases".

In the system of panchayets there were quite a few good lessons to be learnt by the foreign administrators :

First, the ideal of the panchayet system as ascertained by early British administrators was to produce between two disputants a reconciliation and a compromise for the general good.

The panchayet system also contained in it the germ of modern popular suffrage.

Suffrage naturally leads in a way to civic responsibility. Attendance at panchayets was compulsory and hence the villager was taught to take an interest in local self government. Government recognised the value of a citizen's opinion even though that citizen be an illiterate villager. We find the system aiming at seeking the assistance of "the most respectable people and men of good sense and probity." The system cultivated habits of reasoning and good judgment.

In theory, and very often in practice as well, nothing could have been more simple than the procedure of the panchayet, which showed how eminently suitable it was for the illiterate villagers of the rural areas.

There is ample evidence to show that their popularity rested on the great fairness which almost universally marked their decisions.

Another remarkable asset of the panchayet system was its adaptability. It could be used for any and every kind of case whether civil or criminal whether simple or complicated.

We may close with the tribute paid to this remarkable institution by James Grant in 1818 : "Panchayets are certainly popular. If well acted up to, the panchayets would always

be a grand arm against injustice and oppression. That panchayets should still be popular notwithstanding the corruption and dishonesty which have been usually practised, clearly shows that there is much more good than evil resulting from them ”.

3

METHOD IN SOCIAL SCIENCE

By P. R. DAMLE

It is gratifying to find that social scientists all over the world are paying in recent times deliberate attention to the question of method and it is expected that henceforward the conclusions reached in social sciences will, as a result, be more adequate and valid than they have been in the past. On the other hand, preoccupation with method is apt to result in distracting attention from the main objectives of science and to some extent this appears to have happened. Instead of feeling surer of his ground the social scientist of today seems more than ever diffident of reaching his goal and often indeed seems to look upon this as his distinctive contribution to the progress of his study ! Those of us who are familiar with the writings and trends among present-day social scientists must have noted the dominance of this tendency. So far as the present article is concerned, while general acquaintance with some of the main present tendencies in the study of sciences like Economics, Politics and Sociology, and personal reflection over the question of the method of Philosophy constitute the background of the ideas expressed here, the impression which I gathered as a participant in two recent Social Seminars—one in India and the other at Oxford listening to expositions by specialists of the difficulties experienced by students of Social sciences has induced me to put forward what I believe is the correct stand to take in this matter. As a student of philosophy, I welcomed the interest in philosophy evinced at these seminars by workers in the social sciences. As a matter of fact, more

than one of them expressed the need to acknowledge the kinship of social science with philosophy and emphasized the desirability of philosophical training for social scientists. On the other hand, the reasons why such assistance from philosophy was sought and the manner in which philosophical technique was used by these workers made me uneasy.

In the first place, the view commonly advanced that social sciences have or ought to have a special method must itself be entertained with caution. In one sense each science, or even division of science must adopt techniques suitable for its subject matter and in that sense have its own method. But such techniques are based upon and arise from the application of the general principles of scientific method to the particular facts under consideration and do not indicate a difference about basic methodology. Similar considerations apply to the now actively acknowledged kinship of social science with philosophy. The suggestion that there is in principle greater kinship between social science and philosophy than between physical science and philosophy is, I think, unjustified. The relationship is precisely of the same kind in either case. Nor is it correct to classify philosophy as a social science—for philosophy is not a special science, and it is not more of a social than a physical science. Indeed, at the present moment the tendency to raise and tackle philosophical problems suggested by their special studies and even advancing theories about the general character of reality is quite common among natural scientists and mathematicians. Some of them have said very valuable things on the questions raised and they are certainly as much entitled as any one else to raise philosophical questions suggested by the particular facts or kind of facts they study. How far the natural scientists' views on the general character of reality are to be accepted must of course be determined not by his eminence as a scientist but by the validity of his reasoning, which will depend largely on training in the philosophical method. Unlike the physicist and the mathematician the social scientist appears to bring in philosophical reflection not at the end, but almost before the commencement of his special task. It takes the form, often, of reflection on the

nature of the method suitable to social science and consists in indicating the difficulties of observing social facts with objectivity and precision. Clearly, there *are* difficulties in the matter and they arise from the situation that the facts which the social scientist has to study belong to more than one context—the individual and the social, as well as the human and the non-human, and inevitably present difficulties in observation. Politics and sociology thus observe events which are both social and individual, sociology and economics observe events which are both psychological and physical. Many social facts again have an important affective side and are connected with human desires, likes and dislikes, and innate tendencies of various kinds. In one way or another, therefore, the social scientist has to deal with the complications arising out of the complex nature of the entities he studies and has to try and synthesize their several aspects. None of the aspects can be ignored and it is not always easy to understand how it is related to the other aspects. It is natural to feel overwhelmed by the complexity of the situation and conclude that no objective knowledge can be achieved in the field. The correct remedy, however, is to disentangle the varied pattern into its constituent elements and pool together the results of the study in appropriate ways, of each of the elements.

I may mention two particular difficulties which seem so often to worry social scientists—one arises out of the fact that while the statistical method seems necessary—it cannot give certain or precise conclusions. The argument that the notion of an average or a typical case is unsatisfactory for giving us knowledge of any concrete reality — chiefly when the reality refers to a human situation is often put forward and since we cannot in science usually do anything more than reaching an average it is suggested that we are thus always away from truth. Now, clearly, this is not a difficulty of the social scientist *alone* but of *all* scientists—and chiefly of physical science where observation is exclusively by the objective method. And in the second place ‘an average’ is not really so misleading as its critics often suggest. Considerable use of this argument was made some decades ago by philosophical thinkers in order

to prove that science which uses this method can never give us concrete reality, for which we must, therefore, it was pleaded, take recourse to philosophy. On reflection, however, it will be noticed that this is not the correct approach to the problem. An average like an abstraction only misleads when it is mistaken for a concrete reality. Used as a guide to, and indication of the latter, it is useful and reliable, provided of course necessary care has been taken in establishing it. By necessary care is meant care in appreciating the kind of facts being observed and their various aspects before proceeding to establish average conclusions about them; and every scientist worth his name—whether a natural scientist or a social scientist—may be presumed to observe this important prerequisite. There is, therefore, no special reason why the Social Scientist should feel discouraged by the fact that he has to use this method, and all that he has to do in view of the greater complexity of his facts is that he should use this method with circumspection. Precisely the same argument applies to the difficulty presented by the fact that inevitably in all science we make use of abstractions. Averages and abstractions whether we like it or not form an inevitable part of any method of knowledge we adopt and while we should be aware of their characteristic limitations there is no need at all to despair. And what is more, there is no option—anywhere.

Another feature of human knowledge which seems to intrigue and to distress social scientists is its 'subjectivity.' All observations must in a sense be subjective—but subjectivity in this sense is *not* inconsistent with tentative objectivity and indeed mere or pure objectivity is an unreal and meaningless abstraction. The very assertion of subjectivity is itself either objective or is nothing at all. In social and political thought, planning in the economic field etc. we must in a sense always start with subjective judgment and estimates of situations—but we can always pass on from these to relatively objective positions. What applies to abstraction and average applies here also, namely that subjectivity to an extent is inevitable even in observation in the physical field, but nowhere is it inconsistent with a degree of objectivity. And absolute

objectivity is not only unattainable anywhere but is not even a genuine and significant concept.

The interplay of the individual and society in most social events is another source of complication in social observation. There is a natural temptation to reduce one of the elements—the individual or the social—to the other. Neither practical experience nor consistent theory, however, supports such extreme views, and however arduous the process the social scientist must try and observe his facts *without* undue preference for either factor of the situation. Like all ultimate dualities, the social and the individual elements must be genuinely accepted as ultimate and in our observation of social events, we must eschew undue obsession with either of these ultimates. The proper role for human understanding as regards ultimates is only to try and observe their interplay faithfully, and in practice the successful plan is to attend actively to that which at the moment seems ignored or neglected.

A large number of events in social science also have what may be described as a practical aspect : They are connected with prescriptions either as their cause or their effect. They are also related to human emotions in the same manner. The social scientist must avoid in regard to these the two extremes of either ignoring this aspect of the facts altogether, or of hastily concluding that because they have this aspect they are immune altogether from the laws which govern other facts.

I would next like to make certain observations with particular reference to the science of psychology which having progressively shaken off its philosophical affiliations is now being treated as a special science having contacts both with natural and social sciences.

With regard to the question of the method to be adopted in this study, the consensus of opinion now supports the exclusive use of the objective experimental method, and deprecates the earlier use of Introspection in this field. I have often wondered whether this is really a reasonable attitude. I am far from suggesting that very useful and reliable information about 'mind' cannot be secured through the method of objective observation of behaviour and the study of the human organism,

specially the nervous system. I would add further that Introspection, as used in the past as almost the sole method of observation, has had serious drawbacks. And yet I do not think that psychologists will be well advised at any time to turn their back completely on Introspection as *one* method of observing psychological facts. Indeed, it appears to me that some of the difficulties of the modern psychologist are due to the fact that he disclaims his natural heritage in method and content. Mere objective observation of mental events do not seem to yield certain and definite conclusions on many matters. If that observation was supplemented by the natural method of observation of mental events—namely introspection, psychology need not have as many puzzles, and mere probable guesses etc. as it appears to, in the hands of the modern psychologist. If I may say so, the true superiority of modern to earlier psychology consists, as it is fit, in the more scientific view it takes of mind and mental activities—and the dispelling of the mystery attached to the province of the mental. The old notion that mental life was restricted to certain abstract or highly evolved or prominent mental experiences and were independent of the body has been rightly given up by modern psychology. But we could still retain not only practically and inevitably but deliberately and methodically the data to be collected by a careful use of the method of direct observation of the mind by the agent himself. What applies directly to psychology applies indirectly to all social sciences because they include among the facts of their study numerous mental phenomena—individual and social. While a caution like this is, I believe, useful to social scientists everywhere it is even more so to Indian workers in the field for two reasons. The first is that as in several other fields of activity, we are at present taking our first steps in social science and if we learn from the mistakes committed elsewhere, we may avoid some of their pitfalls. Secondly, in the West and in the U. S. A., workers in these fields whatever their theoretical positions, do not, as a matter of fact break off with the past in any department, and therefore, the actual harm done is not great, at least so far. I can say this from personal experience of philosophical

thinkers in Oxford who while contesting the claims of metaphysics as understood so far show their own intimate acquaintance with it and indeed indicate in a sense their partial acceptance of it in an improved form !

The conclusion which is indicated by our brief discussion so far and which I believe, deserves to be borne in mind by students of social sciences may now be briefly indicated. There is no need or justification for maintaining that social science has or ought to have a method which is in principle different from that of physical science. Method in science must have the same general characteristics of objectivity, of system, and in this sense of rationality. Rationality thus understood is not inconsistent either with loyalty to experience, or suitable use of what is often described as 'intuition'. On the other hand, social sciences, including Psychology ought not to depend solely on the techniques useful in physical sciences, and the objectivity they have to observe must not exclude the use of the natural method of observation of psychological and social facts namely introspection. Psychology in particular having for a long time been closely associated with Philosophy, while it should make greater and greater use of objective observation—need not be in a great hurry to break off all connexion with that study and ought not to turn its back on Introspection as a method of observation of its facts. While Psychology and the other non-physical sciences must not, as stated earlier mix up their practical with their theoretical motive, one cannot altogether ignore that their subject matter is more directly and intimately connected with voluntary human behaviour and it is of the utmost importance that they should collect their facts with an open mind and make use of all the methods which the nature of the facts suggests and allows. Social scientists ought to avoid the tendency to rest in uncertainty—because absolute certainty is not available anywhere. They must in the second place not identify objectivity and rationality with the technique of physical science, nor on the other hand believe that in social science one can afford to ignore the physical setting of social events. The present need of progressive knowledge and control of social and psychological provinces of

experience is so urgent that social scientists it is to be hoped will respond to the challenge of our times and help to make human existence less uneasy than it has now been for some decades.

4

MACHINE MIND AND EDUCATION

B. B. DESHPANDE

On an occasion like the Silver Jubilee Celebration of the Modern Education Society, all educationally-minded persons are bound to be filled with a sense of joy and pride at the success of those who undertook this collective venture in the field of education. It is at the same time an occasion when those who are actively engaged in it, may well take stock of what has been achieved, the difficulties that face them at present and their aspirations for the future. It may well induce the general public on one hand and the Society on the other to exchange ideas about the mutual needs and may well provide the Society with an opportunity to examine the problems of education at the social, political and academic levels.

Apart from these social, political and academic levels, one may also consider this question from the scientific point of view. If once it is granted that the phenomena of intelligence conform to laws and the evolution of intelligence in human beings also conforms to laws, it inevitably follows that education cannot be guided rightly without the knowledge of these laws, and educational psychology comes to occupy a place of fundamental importance in the field of education. A careful survey of educational history also shows that the most drastic fundamental and revolutionary changes in Education have always resulted from man's ideas about his own mind and its working. Conceived in the philosophic-speculations, the science of Educational Psychology during the later half of the 19th century was dominated by the 'faculty' theory of human

intellect. This faculty theory was supplanted by the Herbartian School which did much to stimulate the objective investigation of mental functions. Major steps in this scientific progress in relation to education were taken by philosophical pragmatists like William James and James Dewey who insisted upon strictly practical and scientific analysis of mind.

Ours is an age in which Science has enabled man to juggle with the hearts of the infinitesimal atoms themselves. Science seems to have endowed man with extraordinary powers so that he is actually threatening to wipe out the whole of the human race, or to jump from the earth to the moon! It may be that Science has something equally startling to say about man himself.

It would therefore be worthwhile to trace in short the historical developments of the inroads that Science has made during the last 50 years in the analysis of the mind, its working and its education

During the course of the 19th century certain far-reaching, fateful and ever-growing developments were taking place in industry and technology, and in all these lines of development an ever increasing importance came to be attached to automatic control of machinery. For hundreds of years, a few examples of true automatic control system have been already known. The small sails at right angles to the main one, that were always installed on windmills to keep its sails always facing the wind without any human supervision and manipulation was a very old automatic control device. With steam power came the engine governor to automatically control the speed. All such things were, however very few and far between and relatively rough and slow. The great advance in self-regulating mechanisms in the 20th century has arisen on account of the substitution of steam by electric power. The facility of transformation of electrical energy into various other forms of energy ushered a new era in this respect and the tremendous advance in electrical technology brought forth a host of such devices in so many fields of industry. It also enlarged the very scope of these devices and increased their accuracy, the variety of their forms and the rapidity of their

action at an amazing pace. In the last two decades, the problems arising in more complex technology have given birth to a new family of such devices. Chemical plants needed regulators of temperature and flow; air warfare called for rapid and precise control of searchlights and anti-air-craft guns; and radio required circuits which would give very accurate amplification.

Automatic controls are not in fact primarily an economic measure but more a necessity dictated by the nature of modern servicing of manufactured products and by the large demand for goods of uniformly high standard. Many articles in current use, must be processed under conditions of speed, temperature, pressure and chemical exchange, which make human control impracticable on an extensive scale. Modern machines and instruments themselves must often satisfy unprecedentedly high standards of quality and beyond certain limits the discrimination and control of qualitative differences elude human capacity. But the speciality of the 20th century is not so much in the vast number of automatic control devices and their use; but the recognition of the common and basic principles upon which all such devices work and the creation of an independent branch of science of automatic control based upon these common principles. The total scope of this science itself has been developed to such an extent that it has given us new insight into a wide variety of happenings both in nature and in man.

The machines that impress us most are those that work in a manner reminiscent in some striking way of animal or human behaviour. All such machines incorporate some form of automatic control. This is invariably achieved by a mechanism which operates in such a way that it regulates the performance of the machine at every moment according to the result produced by the machine's performance immediately before. In other words, the output of the machine is made to control its own operation with a view of not allowing the output at any time either to exceed or be less than a certain value. This is the famous principle of negative feed back, a term originally used in Radio Engineering.

Side by side with the increase of automatic control devices, came the development of computers or computing machines. Mathematical machines have a long history but the name should not mislead one into belief that they can perform only mathematical operations. Consider the so called 'Logical truth Calculator' built in America and 'Logical Computer' built in England. They are as it were machines of logic. There are certain general principles of communication of information which underlie the operation of language in man and automatic control in machines. It is this similarity that enables appropriate self regulating machines to take over some functions of human language. Mankind stores its information either in memory or in records generally with the help of language. But all logically communicable information can in fact be expressed by combinations of two types of symbols only. Red Indians used long and short smoke signals for signalling purposes, Congo tribes use short and long drum beats for the same purpose, and the Morse code is but an elaboration carried out in the field of Electrical Engineering; this together with wireless telegraphy has provided the technical basis for the transmission of the most cumbersome kind of information and leads to automatic control even across the continents in an incredibly short time.

Words, codes and languages all these being expressible in combination of two symbols, the arithmetical figures '1' and '0' may well serve this purpose and it is the vast combinations of '0' and '1' constituting not only mathematical calculations but all these codes, words and languages, making up all kinds of information, that the computing machine handles with all the accuracy and promptness of an Alladin's Lamp.

This is the explanation of the surprising fact that an electronic computer can be used for such diverse operations as mathematical calculations, or running an automatic factory or to take the data furnished by the radar and to work out from these data with almost instantaneous speed as to where an air-craft would be after a certain short interval of time and to direct an anti-air craft gun, so as to bring down the plane

without any human intervention.

The computer machine is capable in principle of translating one language into another. Considerable progress has been made in constructing such a machine to translate scientific papers from Russian into English. Even though the German of Goethe cannot at present be translated into the English of Wordsworth or the Sanskrit of Kalidas, it is by no means certain that this will be true in another five or ten years.

Side by side with the automatic devices, these computing machines have progressed to a wonderful extent and strange to say they have a 'memory' for intermediate steps of operation and also to control the order of operations. Furthermore they have the power to select between alternative procedures, at various stages of work on the basis of appropriate criteria that is to say they can in a sense exercise judgment.

To this category, belong some of the modern machines that play games like 'noughts and crosses' and also 'draughts'. Even Chess-playing has been designed. Machines like these simulate certain aspects of thinking in man, while other types display various features of behaviour in living beings. A number of people have tried their hand at building mechanisms that themselves learn by 'trial and error'. Shannon has constructed a mechanical maze-runner and this contraption can learn to solve mazes after the manner of rats. Dr. Ashly has built a machine called the Homoestat which not only exhibits purposive behaviour but acts like an organism in that, it aims at a fixed goal, while it is at the same time flexible in following the routes leading to that goal.

All these and many similar homoesthetic mechanisms are to be found in the human and animal physiology and they are operated by means of the automatic nervous system. Scientists have thus come to the conclusion that whenever departure from equilibrium occurs, feed-back messages along nerves of the automatic nervous system come into action and if it be at all possible, set matters right. Much of the involuntary and all voluntary action is thus controlled by the central nervous system, the spinal cord and the brain. The

brain is of course associated with all mental processes.

Support to this conclusion comes from elsewhere. In electrical engineering, if negative feed back arrangement in a device goes wrong and becomes positive it generally leads to instability and oscillations. As feed backs in the nervous system are of the same type, they in certain cerebellar brain diseases exhibit exactly similar instability in unco-ordinated muscular activity of an oscillatory character instead of a purposive nature; and the physiologists have found that fundamental elements constituting messages both in the electronic digital computer and in the nervous system are of the same kind. Signals from the destination of messages leaving the brain are continuously fed back to the nervous centre controlling the character of the stream of outgoing messages. The storage of information or 'memory' is in fact but a part of this activity. There is such a close analogy between mechanical storage of information and memory. All experience leaves what may be called memory traces and presumably a memory trace consists of a very minute but enduring physiological change in the brain. However, regarding the nature of the human memory, the general scientific opinion is slightly different. The functional memory of a digital computor is not situated at any single place at all. The retained pieces of information are in the form of electrical impulses, circulating in circuits until required for further computational work. This is known as functional memory and memory in the human brain is of this functional nature.

With this conception about the nature of 'memory' the neurophysiologist stand-point is naturally led to regard a goal in activity as corresponding to the attainment of an equilibrium level, in nature which is as it were a problem for the organism to reach. When the goal is actually reached, the problem is solved and often the solution of a problem may be attained after a series of attempts i. e. by trial and error method. All this has been elaborated by numerous experiments and scientists have come to conclude that the simple concept of negative feed back is applicable not only to mechanical or electrical automatic regulation devices but also the auto-

matic central nervous system and to the problem-solving behaviour of human beings.

This school of psychology goes further and maintains that thinking or reasoning is essentially a process of the same nature. Problem solving behaviour may be overt and observable, but it may well be covert when it occurs in thought. In other words, problem solving is implicit in thinking and if thought symbolises or models reality, then its mechanism has to be like those used to solve problems and in this sense some thought processes might go on for years, while others may work themselves out in a fleeting moment. But all thinking is implicit in problem solving by trial and error, and mechanisms have been built and will certainly be further developed which solve problems by trial and error in animals and men as well as in machines.

Broadly speaking, to learn is to acquire skill-skill of habit or of ideas. We learn what is right when we solve a problem but we also learn what is wrong when we fail to solve the problem. Success in this sense makes it more likely that future success in similar situations will be achieved more easily and more speedily. In learning manual skill, we try and try again until all incorrect moves are eliminated. In acquiring a habit, less and less effort is wasted on incipient wrong moves until habit becomes second nature. Obtaining knowledge consists also in developing correct reactions to mental clues and Thorndike's 'Law of Effect' may be stated as 'each success modifies subsequent activity by increasing the probability that such a step will be taken again, while each failure decreases the probability of a similar step in the future.'

Machines have been constructed so as to respond to a situation in a number of ways. What particular response it actually makes at the start is in a sense a matter of chance. Once however, the 'desired' response has been made the chances of its being made again will be greater than before, until after some time the probability of a correct response will almost be a certainty. Such a machine learns by experience. There may be, other modes of learning-learning by association, learning by insight etc. But a good many physio-

logists think it obvious that the differences between various kinds of learning are not so much of a fundamental nature. In every kind of learning incorrect responses are stamped out while correct ones are stamped in. Knowledge, as such cannot be gauged objectively. It can only manifest itself as modifications of reactions to environments. It has been possible to design electrical circuits simulating a hypothetical nervous system in conformity with data from behaviour experiments. We are thus faced with machines which exhibit intelligent behaviour.

Machines, which play Noughts and crosses are comparatively simple. Shannon has recently described the principles on which a machine can be built to play a very good game of chess. It would not invariably beat the Chess masters but would certainly give a very good game to ordinary players. If skilful chess playing is supposed to require thinking what about thinking in the case of this machine? Shannon holds that this type of machine forces us either to admit the possibility of some degree of mechanised thinking or to restrict the definition of what we mean by thinking. In playing chess, something in the nature of judgment, trial and error and sense of quality in choosing from a range of possible moves are involved. For translation of languages, orchestration of melodies, logical deduction, strategic decisions from simplified military operations and answers to telephone calls according to individual circumstances, powers of intelligence are similarly required. With all these advances in automatic machines, the possibility of mechanised thinking cannot be dismissed with mere ridicule. In answer to the question, as to whether machines can 'think' A. M. Turing proposed that a machine should be submitted to interrogation; it is no use getting involved in mere verbal definitions of the words 'machine' 'think'. If the answers of the interrogated machines are indistinguishable from those of an intelligent human being, then the machine must be credited with an equivalent intelligence for that subject. Turing's idea is to place the examiner in one room and the machine in another (questions will be put to this 'examinee' via a teleprinter and answers will be

received from the 'student' in the same way for the time being). These answers from the student, the examiner is to receive together with those from other 'ordinary' students.

If the examiner receives a series of meaningless answers he may suspect that he is being answered by an 'unintelligent' student. But if he gets a sustained series of intelligent answers he has to concede that the 'source' of the reply is intelligent and able to 'think'.

Turing's proposed procedure can be described as follows : Suppose that an examiner puts questions to a sonnet-writing 'student' in the other room.

Examiner — In the first line of your sonnet which reads 'Shall I compare thee to a summer day' would not the word 'a spring day' do as well or even better ?

Answer : 'It would not scan properly.'

Examiner : "How about a 'Winter's day'? That would scan all right."

Answer : "Yes but nobody wants to be compared to a winter's day."

Examiner : "Would you not say that Mr. Pickwick reminds you of a Christmas day?"

Answer : "In a way."

Examiner : "Yet Christmas is winter's day and I do not think Mr. Pickwick would mind the comparison."

Answer : "I do not think you are serious. By winter's day one means a typical winter's day rather than a special day like Christmas."

If the conversation goes on in this way how can the examiner say whether one student is a thinking being and the other is not.

Turing does suppose that in about 50 years, design would be so much advanced that the construction of a computer of this type would be quite possible. He further recommends that machines should be provided with artificial sense-organs and should be 'taught' to understand and speak English. Gray Walter has already constructed a machine with two sense organs-one for sight and one for moving in a straight line or for returning. The behaviour of this rudimentary

model is already so complex as to be unpredictable. The surprising thing is not that it does anything very well but that *it does anything at all with so little.*

All these developments in machines with powers of self-regulation, selection, storing of information and appropriate response which seem so much analogous to free will, discrimination, and memory raise the question as to how far the faculties of a machine will approach those of a human being.

The traditional mind-body problems discussed by metaphysicians, could hardly be hoped to be solved by the speculative gossamer doctrines of either psycho-physical parallelism or ephiphenomenalism. At the end of the 19th century the simplest but the most radical solution to this difficulty of reconciling the inter-action between the mind and the body appeared to be an out-right rejection of mind-body dualism, resulting either in a thorough-going mentalism, or an outright materialism or some form of behaviourism. Could they however be anything more than evanescent speculative bubbles? Ryle and the logical positivists advocate as an escape from dualism a better and closer analysis of the concept of mind and maintain that the postulation of the existence of the mind itself is a category mistake and that the statements about mind and mental events have been too easily accepted as categorical propositions when they should properly be regarded as hypothetical propositions or statements relating to disposition to behave in various ways.

Upon this background impinge the ideas derived from the foregoing science of automatic control in man and machines i. e. the science of cybernetics. It shows that in principle, so many features of human behaviour are imitable by artefact and *that the function of a machine is to its structure, as mind is to body.* Wiener, Ashly and others do uphold this Frankensteinian form of the solution of mind-body dualism. It may be that the concept of the world as a bisectile hybrid half mental half material-with an imponderable ghost shuttling itself between its two extremes is but a clumsy dream but whether this can be replaced by the lucid implications of the metaphysics of this new science, as an automaton, automatically reflecting its

own automatism, remains to be seen.

Norbert Wiener one of the foremost exponents of this school of thought, however now bewails that he has opened a Pandora's Box. He was horrified to learn that one of the most widely read papers in America, was seriously considering the question of popularising the idea that human beings were superfluous and in future can be replaced by machines. Even though such a situation seems to be rather unpalatable the following one may perhaps appear to be quite conservative and acceptable.

In Laputa Gulliver was shown a large room, in which was kept a frame that took up a great part of the room. The frame carried many pieces of wood linked by wires. On these pieces were written words of the Laputian language without any order. The pupils, 40 in number, each of them, held a handle giving the handles a turn, the disposition of the words being shuffled. Six hours a day the young students were engaged in this task and the Professor of Speculative-learning assured Gulliver that by this contrivance the most ignorant person may write philosophy, poetry and politics and also showed him several volumes of already collected knowledge to give the world a complete body of all arts and sciences.

The Professor of Speculative learning in Liliput required at least 40 students working six hours a day for perhaps some years to give the world a complete body of all arts and science. But a Professor of cybernetics will, perhaps in near future, require only one or two computing machines to do the same thing in perhaps half an hour. Out of sheer zest for uptodate learning from the west, very soon, educationalists may preach in India that both the students and teachers are rather superfluous and may well be replaced by smaller and larger computing machines in order to modernise education beyond modern times !

5

GENERAL EDUCATION; ITS MEANING, PURPOSE ETC.

By S. R. DONGERKERY

I deem it a privilege and honour to have been asked to associate myself with the Silver Jubilee of the Modern Education Society and its Nowrosjeej Wadia College by writing an article for its Commemoration Volume. I have followed with great admiration the activities of the devoted and enthusiastic band of educationists who founded the college in the face of great odds and have helped to build it from strength to strength until it has come to occupy a prominent place among the leading institutions of higher education in our country. Not content with its activities in Poona, the Society has extended them to the City of Bombay, where it is today conducting two big colleges, one of arts and science and the other of law, which mainly cater for the growing student population of North Bombay.

I have chosen 'General Education' for the subject of this article, partly because of my own interest in the movement designated by that name, and partly because of its topical interest for our universities and colleges which will, sooner or later, introduce the teaching of courses in general education.

The term "general education" has been differently interpreted by different educational institutions in the United States of America, which have sought, during the last four decades, to translate the idea underlying the movement into their curricula. As has been well put by Professor Justus Buchler of Columbia College, "deans and presidents depict

as 'general education' a curriculum in which every course is prescribed and a curriculum in which no course whatever is prescribed; a structure which is interdepartmental and a structure which is simply unconventional in some respect; a system of teaching which emphasizes small-class instruction and a system which features virtuoso lecturing by one man or a corps of men to hundreds of students at a sitting." (*Columbia Spectator*). The same writer, who is the chairman of the Contemporary Civilization Department of Columbia College (N. Y.), and a leading proponent of the theory of general education, has attempted to elucidate the term by stating that the many versions of general education that prevail "may be regarded collectively as the attempt to re-interpret the meaning of liberal education in a twentieth-century framework".

One way of clearing the cobwebs of confusion that have gathered round the term "general education" would be to state what it does *not* signify. Thus, it does not mean universal education or education for all; nor does it imply that it deals with all subjects. The Report of the Harvard Committee on **General Education in a Free Society**, which is looked upon as a very authoritative document on the subject, says general education "does not mean some airy education in knowledge in general", and proceeds to define it as "that part of a student's whole education which looks first of all to his life as a responsible human being and citizen; while the term, special education, indicates that part which looks to the student's competence in some occupation" (*Vide* p. 51). This definition emphasizes two important features of general education, namely, (a) the development of personality and (b) training for citizenship. These features were already emphasized by the Greeks in their concept of a "liberal" education. In the democratic framework of the twentieth century, clearly, the training for citizenship calls for a greater emphasis.

Among the university institutions in the U. S. A., Columbia College (N. Y.) might well be described as a pioneer in 'general education'. Immediately after the first World War, when it began to be realized that the growing knowledge of the physical sciences was being applied to destructive rather than construc-

tive purposes, educationists in some of the western countries began to inquire why this should be so, and came to the conclusion that the neglect of humanistic studies was mainly responsible for this unfortunate state of affairs. Columbia College started a one-year course in 'War Issues' in 1917-18 with the idea of restoring the human values in education through a study of the humanities. The course was renamed "An introduction to Contemporary Civilization in the West" two years later, and expanded, in 1929, into a two-year course for students of the first two years of the college curriculum. In 1936, the American Council of Learned Societies sponsored a symposium on the organization of the humanities in the American universities. The idea caught on, and committees and conferences began to be held to discuss reforms in the curriculum in the liberal arts colleges all over the country, with a view to evolving a 'balanced' curriculum which would prepare their students for assuming the responsibilities of citizenship, not merely in their own democratic set-up, but in a wider world. A committee appointed by the Association of American Colleges published its report on "the Post-War Responsibilities of Liberal Education", in 1943. The College of Liberal Arts of Iowa adopted, in 1944, a new curriculum designed to guide its students towards a mastery of the leading ideas, the significant facts, the habits of thought and methods of work in several fields, such as the natural and the social sciences, language and literature, the fine arts, history and philosophy so as to enable them to understand better the world and the society in which they lived, appreciate the basic values of civilization and culture, and accept their responsibilities to society. Yale and Princeton were not slow to follow with their own programmes to achieve the same objective. The Report of the Harvard Committee on **General Education in a Free Society**, which came out in 1945, put general education on a pedestal.

The concept of "general education" is one, though its manifestations are many and various. It aims at training the student for citizenship and familiarising him with the areas of knowledge which comprise the humanities, the natural and the social sciences. The programmes of general education

operated in the different institutions of higher education in the U. S. A. vary from place to place. They differ in content, duration and method. Sometimes, they go under different labels. Thus, St. John's College, Annapolis, calls its programme the "great books" programme, Brown University speaks of its programme as the "Identification and Criticism of Ideas", Yale College prefers the shorter name of "Directed Studies". Whatever the name given to it in any particular institution, there is general agreement about the abilities or traits and characteristics of mind that general education seeks to develop. These, according to the Harvard Committee's Report are : "to think effectively, to communicate thought, to make relevant judgments and to discriminate among values", each of which is "an indispensable co-existent function of a sanely growing mind". Montaigne was unconsciously advocating the virtues and the purpose of general education when he asserted that "the purpose of education is not to make a scholar but a man."

The movement of general education in America may be regarded as a reaction against the free-elective system introduced by President Eliot in Harvard University, which left the student of the liberal arts college free to select any of the numerous courses of study offered by the institution so long as he was able to make up the sixteen full-year courses for the bachelor's degree. This unfettered choice resulted in many cases in the selection of courses which had no relation to one another. The liberal arts college became, in effect, an intellectual cafeteria where there was no guarantee that a student would be provided with a balanced education. The deleterious effects of this system of education, which was, in fact, the result of ideas imported from the German universities in the last quarter of the nineteenth century, were realized by President Eliot's successor, Lowell, who replaced it by a somewhat better system, known as 'concentration and distribution,' which required the student to concentrate on a group of allied subjects, while choosing from a number of other subjects unconnected with the area of concentration. This reform was not sufficiently far-reaching, inasmuch as it made the student primarily a specialist, with a smattering of a few subjects not related to

his speciality. It could, in no sense, be regarded as a balanced course of studies. It encouraged professionalism and scholarship at the expense of culture.

In the context of university education in Europe, which was developing on the same lines, the great Spanish savant, Ortega Y Gasset, deplored that the contemporary university had "developed the mere seed of professional instruction into an enormous activity", added the function of research and almost entirely abandoned the teaching and transmission of culture. The consequence, according to him, was disastrous, and was responsible for the convulsive situation in Europe, which is best described in his own words, as follows :—"the average Englishman, the average Frenchman, the average German are uncultured. They are ignorant of the essential system of ideas concerning the world and man which belong to our time. This average person is the new barbarian, a laggard behind the contemporary civilization, archaic and primitive in contrast with his problems, which are grimly, relentlessly modern. This new barbarian is, above all, the professional man, more learned than ever before, but at the same time more uncultured—the engineer, the physician, the lawyer, the scientist". General education attempts to alter this situation by preparing men and women to shoulder their responsibilities as cultured individuals, alive to the situation in which they find themselves placed, and to their responsibilities as human beings and as citizens. To do this it is necessary not only to change the content of the knowledge it seeks to impart, but the approach to that knowledge and the methods of instruction.

The content of general education, therefore, includes the humanities, the natural sciences and the social sciences. The study of the humanities helps man to know himself and his fellows, his own mental, emotional and spiritual make-up and the springs and motives of human action, which is necessary if he is to understand the people with whom he has to deal. The natural sciences (physical and biological) teach man to understand his place in relation to the physical universe. What he needs, however, is a comprehending rather than a compre-

hensive knowledge of the scientific world, because in a democracy it is the laymen rather than the scientists who are the policy makers and legislators, and they must, therefore, understand the potentialities and also the limitations of science. The social sciences provide man with a field for investigation of the relationship he bears to society, taking 'society,' in the widest sense of the term, to include family, community, country and the world at large. Without a knowledge of the ideas which have led to the evolution of social institutions at the different stages of civilization in different parts of the world, he cannot judge or evaluate individual human conduct or historical events and the conditions under which people live and behave towards one another. Last, but not least, independent thinking and the art of communication are essential for an educated person in order to face the problems of the modern world which are growing in complexity every day and which require the co-operation of many minds for their solution. It would not be far-fetched to describe the present age as an age of communication. Any general education programme to be effective must, consequently, include a study of the humanities, the natural and the social sciences and the art of communication.

Programmes of general education differ from one another as mentioned above, in their manner of approach to the subject, their duration and the arrangement of the courses in relation to those in which students wish to specialize. Some universities and colleges are content with providing only introductory or preparatory courses, which may be followed up later by those who want to specialize in one or more areas for purposes of scholarship or research, or for adopting one of the learned professions. Some other institutions give only survey courses in the different areas with the same object. A careful examination of these courses will show that they are really either dilutions or epitomes of departmental courses and, as such, fall far short of providing the basic training required for citizenship, since they make no attempt to integrate the knowledge which the student acquires in the different areas of knowledge. They are not even interdepartmental,

far less integrated, courses, and do not, therefore, enable the student to understand the mutual relationship between the different fields of knowledge. Besides, survey courses tend to become superficial and fragmentary because they attempt too much. They merely succeed in giving the student a smattering of information in the different fields, without enabling him to come to grips with any subject. Luckily, this type of courses is being superseded today in most colleges and universities by integrated courses, which do not suffer from superficiality or fragmentation. One school of thought goes to the length of criticizing even these integrated courses, maintaining that real integration should take place not in courses but in the minds of students. It does not believe in the teaching of a subject or course, and contends that education must be student-centred.

What strikes the student of the movement of general education in the U. S. A. is the number of experiments that the institutions are making to evolve a better system on the basis of the experience gained, and the literature that is growing daily around the idea of general education, which reflects the progress made from day to day. It is doubtful whether the last word will ever be said on general education, or an 'ideal' programme will ever be evolved.

The duration of courses in general education varies from institution to institution. In some of them it is two, in some three, and in others four, years. Again, in some universities general courses cover the first two years and do not run on into the period set apart for specialized courses, which occupy the last two years of college. In others, elementary courses in general education are taken in the first two years, and advanced courses in the junior and senior years, the idea being that, while the student is specializing in his field of major study, he must continue to retain his interest in other fields of learning. General and special education courses are thus comparable to rows of tracks laid parallel to each other rather than end to end. A better way of illustrating the point would be to compare this kind of programme to a fusion of two streams, so that the general education stream does not end where the special education one begins, but continues to exercise a pervasive

influence which prevents the student from developing a narrow outlook during the period of specialization.

The method of teaching courses in general education is as important as the content of the courses. Since these courses span different areas of knowledge and the courses themselves have to be integrated, the collaboration of a number of teachers who have specialized in their own fields becomes essential. This will be necessary until a body of teachers with experience of teaching integrated courses has been trained up in one or more institutions. Co-operative teaching is the only possible method, at present, in any event. Co-operative teaching implies that the departmental barriers which have sprung up as a result of specialization have to be demolished, and specialists in the different disciplines must meet to exchange ideas and pool their knowledge. Frequent discussions among them are necessary. Thereby, not only will the courses they are called upon to give be integrated, but their own experience will be enriched, and their own teaching improved. There should also be complete co-operation between the teachers and the students, because it is only the sharing of the joy of the discovery of new relationships in familiar subject-matter that makes teaching vital and effective.

The "discussion method" has been accepted by American educationists as the most effective method for teaching courses in general education. The success of this method depends upon the number of persons taking an active part in the discussion. The size of the discussion class or group is, therefore, most important. Experience in the U. S. A. has proved that a group with 20 to 25, is ideal for purposes of discussion. No discussion can be fruitful unless it is preceded by well-prepared reading assignments. The practice followed by instructors in conducting discussion classes is to prepare their programmes for the whole term and assign readings, from time to time, which the students are expected to prepare at home before they meet again. These assignments are original sources and not specially written text-books. The discussion reveals to what extent the students have absorbed what they have read and are able to interpret

the ideas of the authors in their (the students') own language in the course of the discussion. The discussion also helps the students to learn the art of effective communication by daily practice. In some of the American colleges the lecture-method has been completely superseded by the discussion-method. Even in those institutions where formal lectures continue to be given, greater importance is attached to discussion groups. Of course, the discussion-method can only be adopted if there is a large teaching staff. Discussions entail the active participation of students, who play the part of passive listeners, and no more, when listening to set lectures. As Professor Buchler has ably put it in his brilliant contribution to the subject in his article entitled "What is a Discussion ?" in the Journal of General Education, University of Chicago Press, "If the discussion method is superior to the lecture method, this is not because of its degree of activity but because the establishment of a product of inquiry by students is more fundamental to the deepening of their powers than their acceptance of such a product, and because the assimilation of ideas is more important than the compilation of ideas" (Vol. VIII No. 1, OCT. 1954, p. 9). The discussion method is of particular importance and value in a democracy like that of America or our own, since a democracy is largely government by discussion.

No course in general education can be successfully taught, unless the students have at their disposal good libraries with a large number of classics and reference books. Since the students require to read original sources and the books of great writers, which provide the chief material for the courses, it is necessary to place at their disposal in the library several copies of the books included in their reading assignments. Most colleges and universities in America have special sections called "reserve" sections where these facilities are provided.

If we, in India, wish to make a success of our general education courses, as American educationists have done with their own, we must first set about making large additions to the teaching staffs of our colleges, provide additional rooms for holding discussion classes and make substantial additions

to the libraries. For doing this the colleges will necessarily have to look to Government for financial assistance.

Before closing this article, I wish to point out that the idea of general education is not altogether new to us in India, and specially to the University of Bombay. The late Justice Kashinath Trimbak Telang, who was the first Indian Vice-Chancellor of the University, was a firm believer in the need for providing the undergraduate with a good all-round education rather than a specialized training in a single subject. In moving his proposal for the revision of the courses for the B. A. degree, at a meeting of the Senate on the 14th April, 1890, he said : "A B. A. should, I think, be a man who has had the general cultivation which ought to be the basis of all special cultivation. He should know English and a classical language, should have the discipline which Mathematics gives, should know the elements of logic and of political economy and the physical sciences and have a general knowledge of the history of England and India". The "Telang Courses", introduced as a result of this proposal, remained in force till the year 1913. It can truly be said, therefore, that he advocated a broad-based education for our graduates nearly thirty years before the idea of integrated courses in general education dawned upon the minds of American educationists. The courses in general education, on which colleges and universities in the U. S. A. are experimenting today with increasing success, are based upon the same idea as that with which the late Justice Telang helped to bring about curricular reform in our degree courses, though it was unfortunately abandoned twenty-three years later. The techniques associated with general education in America are, no doubt, new to us. In adopting them, as well as in introducing courses in general education in our universities, as recommended by the University Education Commission 1948-49 and the University Grants Commission, we shall have to study carefully the conditions prevailing here, as contrasted with those obtaining in the U. S. A., so that the necessary modifications and adjustments are made to suit our own conditions.

6

A CENTURY OF MODERN EDUCATION

By V. K. JOAG

In 1857 the three Universities of Calcutta, Bombay and Madras were by law established. A good deal of preparatory work in primary, secondary and higher education was done before then. We have now completed one hundred years since the foundation of these Universities which is rightly regarded by Government and people as marking the introduction of Modern Education in India. The foundation of these Universities was only a modest beginning in this field. But from this small beginning we have progressed tremendously in all fields of education in India. And as we look back over these hundred years we cannot but be struck by the enormous development for good that has taken place.

Critics are found among our own people who ignore all this progress made and consider that the system of education which we have built up during these hundred years is all wrong and therefore needs to be radically altered. We find among these critics, politicians, statesmen, legislators and administrators, members of public services and private individuals. Such criticism often assumes that those who were and have been devoting themselves to the cause of education in India have never recognized the need of marching forward and reforming from time to time our system of education and that consequently this system has remained the same that it was since it was first conceived and adopted. This assumption is entirely incorrect as it has no foundation in fact. Educationists in

India have always welcomed new ideas and have adopted them with suitable modifications required by the circumstances of our own country. They have successfully endeavoured to reform our system of education in all its branches from time to time so as to make it suitable for our changing and growing needs. And the progress of reform has not come to an end with us as in fact, in no country, can it ever come to an end at any stage of its development. Educationists thus, are engaged, now as ever before, in the discussion and adoption of further reforms. Their predecessors during these hundred years also worked for reform and the present generation of Educationists are walking in their footsteps and the generations to come, will and must do the same as long as there are newer and higher ideals to realize in education. It is a continuous movement for reform and progress but it has always been, and in the nature of things, it must always be, a movement from within. Those, therefore, who are engaged in the work of education know well enough how this movement has gathered strength from time to time and has achieved valuable results. That is perhaps the reason why among the radical critics of the present system we do not find many educationists, but mostly persons who, not having been directly connected with education are perhaps not aware of these valuable results which have been achieved in the educational field. If our educational system is to be further reformed that can best be done by stimulating and strengthening the movement for reform from within which has been going on with such good results all these years. Beneficial and lasting results can be achieved only in this way and not by uprooting the present system and replacing it by a brand new scheme. In this year of the centenary of the three Universities it will be an advantage to look back and see for ourselves what has so far been achieved in primary, secondary and higher education by reformers among educationists among whom may be included Educational Officers of Government, private individuals and Educational Societies, Indian and European.

Primary Education :

In the field of primary education if we compare the courses,

methods and teachers in primary schools of our own time with the courses, the methods and the teachers in primary schools of 50 years ago, we shall be struck with the enormous changes that have been brought about in the system of primary education in India. New ideas in education that arose in the West and travelled to the East influenced its progress to a great extent. The basic ideas behind these changes have been to train children successfully to receive and to react upon the world, to take the fullest advantage of their natural equipment for this purpose, to use their play instinct and to make the process of learning a pleasure instead of a burden to them. We thus find many novel features introduced in these days in the courses of instructions in our primary schools. We do not teach now merely the three R's. We pay considerable attention to the training of senses and the organs of movement which we all have to use in the art of living successfully in and through the world. We thus endeavour to teach our children to observe through suitable lessons in the class rooms and more through practical activities in the school gardens, play-grounds, and the open world around us. We also endeavour to teach them to control, variously to combine and successfully and skilfully to employ their muscles, joints and tendons through suitable lessons in drawing, clay-modelling and like subjects and also through well-devised physical exercises. We also pay attention to their creative faculties and help to foster them in suitable ways. We give them a sense of harmony and balance through lessons in music. In all these and other activities our attempt is to make the process of learning a delight to the child, so that children should feel drawn to the schools and not repelled from them. And we must say that educationists have attained considerable success in the pursuit of this aim. The psychology of children at least in cities and towns has undergone a complete change in respect of schools, school-masters and courses of instruction. The idea which in these days appears to be so much favoured that our primary education should be woven round some handicraft was adopted years ago as we can see for ourselves in our primary schools. To people who are not aware of what has been achieved in

the field of our primary education, the idea may appear to be a new revelation but to educationists who have been familiar with what has been done it is certainly not a novel conception. It is true that as understood and employed by the educationists, the idea was and is that the place of handicraft in education is to train a child's powers of observation and its organs of movement and to help the development of its imitative and creative activities. In the selection of handicrafts educationists have also tried to take into consideration as far as possible the environment of the child but the main idea has been to choose a handicraft that would fully interest the child and would be to it a pleasure and a delight and never a task. The idea that the handicrafts to be introduced in schools should be chosen for the economic value of the articles produced through them has never appealed and will never appeal to those who look at the question purely from an educational point of view. If ever the economic value of the articles produced comes to dominate our courses of primary education, learning would lose all its interest for children and children will feel repelled from schools and the change will defeat its purpose.

The introduction of novel features such as those enumerated above naturally led to a demand that primary school teachers should not only be trained persons but should be persons trained in this new outlook and for these and similarly conceived courses and features. Thus corresponding changes came to be introduced in the courses of our training institutions. And we now find these producing, as far as their resources allow, teachers of the new type that are required by our primary schools. It is true that provision of trained teachers for our schools is at present not adequate. But that is due to financial reasons and not to any lack of appreciation of the importance of trained teachers for all primary schools. The attempt of the authorities, therefore, always is to select trained teachers if resources permit such appointments. We thus find several schools under trained masters. It may be that we do not obtain adequate return for our investment in these respects. But the reason for that

is to be found in the fact that we have not yet succeeded in improving the lot of our teachers. Most of them are inadequately paid and so their interest is in the extra work they have to do outside the schools to eke out additional income, more than in their proper work in the schools themselves. But here also there is no lack of desire to improve the lot of our teachers but financial considerations have made it difficult, yet to do as much in the direction, as is desirable, but there has certainly been no lack of inclination in that respect. It will be thus obvious that educationists have been moving in the direction of better and better primary education for our children during these years so far as our circumstances allow.

Secondary Education

We observe the same progressive development in the field of secondary education. If we recall the subjects that students studied in secondary schools about 50 years ago and compare them with the courses which students in secondary schools have now to study in their high schools, we shall be convinced that educationists have not been sitting idle but have been pursuing higher ideals in education. Higher and better results can never descend on us like manna from heaven. We have to go in search of them and the only method of discovering them that is available to man is the method of trial and failure. We have been searching in this manner for better courses for our secondary schools. Attempts were made successfully to secure due recognition to Modern Indian Languages both as subjects of study and as media of instruction and Examination. And now we find that students study a Modern Indian Language at High School as a compulsory subject and they are permitted at examinations to answer their questions in all subjects except English in a Modern Indian Language. We have not lost sight of the importance of technical and vocational education and of the desirability of diverting to these courses, pupils who appear to have a talent for them. Experiments have been undertaken, expert investigations have been made from time to time and in the light of knowledge and information obtained, attempts have been made here and there to give such a bias to our courses.

We have also provided in our High Schools alternative courses some leading to literary, some to technical and some to vocational pursuits.

More and more attention has come to be given to the physical culture of students and it is a matter of gratification that a great deal of progress has been achieved in that direction. Physical exercises, sports and games now play in our high schools a much more important part than they did in the past. If we have not been able to achieve the results that we desire, the fault does not lie in the unwillingness of educationists to change but in the psychology of parents, guardians and pupils. You cannot change the psychology of a whole people within a short space of time. It can only change gradually. And as it changes under the influence of life it may become possible for all concerned to strike new lines of advance in this field and achieve more valuable results. But because more still remains to be done, we must not underrate the value of the progress already made and must not run to the conclusion that nothing at all has so far been achieved.

With the changes made in our high school courses we must also mention the ever increasing importance which in recent times we have come to attach to the training of teachers, at the secondary as well as the primary stage. About forty years ago people perhaps thought that any graduate, or undergraduate could take up the profession of a teacher, that it did not require any special training or preparation. This idea soon changed and training institutions came to be established for secondary teachers as for the primary teachers. There were certificate and diploma courses drawn up and adopted and teachers were encouraged to go in for training. In due course a University degree in training for graduates was instituted and a number of training colleges came to be founded for the training of secondary school teachers. Recently a Master's Degree called M. Ed. has been instituted to encourage Post-graduate studies and research in education. It is now open to a trained graduate to pursue further studies in the science of education and work for the Master's Degree and also for a Doctorate in this field and several have obtained

these degrees.

Thus in respect of courses of Instruction, the methods of teaching and trained masters a great deal of progress has been made in our high school education and more can be achieved if more money is forthcoming.

University Education

We shall now turn to University Education. Here also we shall find a great deal of progress made in several directions during these years. Originally as defined in the Act of Incorporation, the aim of Indian Universities was to ascertain "by means of examinations, the persons who have acquired proficiency in different branches of literature, Science and Arts and reward them by Academical Degrees as evidence of their attainments and marks of honour proportioned thereunto." This limited aim of examining candidates and awarding degrees to such of them as were found qualified was replaced in 1904 in the Indian Universities' Act by a higher ideal. The aim of Indian Universities as now defined was to make "provision for the instruction of students, with power to appoint University professors and lecturers, to hold and manage educational endowments, to erect, equip and maintain university libraries, laboratories and museums, to make regulations relating to the residence and conduct of students and to do all acts which tend to the promotion of study and research." Instead of being purely examining bodies the Universities were now expected to be, to some extent at least, teaching institutions devoted in particular to research. In Bombay, a further advance in this respect was made in 1928 in the Bombay University Act. The aim of the University as here defined is to provide "greater facilities for higher education and to conduct post-graduate teaching and research in all branches of learning including technology, while continuing to exercise due control over the teaching given by colleges affiliated to it from time to time." Much greater emphasis is here laid on the teaching functions of the University in the field of post-graduate work and on research in various branches of learning and in particular in technology. We thus see how the ideals of university education have advanced from time

to time even in the older universities like the University of Bombay. As regards the new Universities that came to be established in various parts of India and also as regards the Universities recently founded in our own State, there the ideals of teaching and research are specifically placed before them as their proper pursuits. Thus in the old and the new Universities our ideals have advanced from time to time, as the result of experience gained and expert investigations made by specially appointed Commissions and Committees, towards higher and higher conceptions of the nature and functions of Universities.

Realization of these higher ideals necessitated suitable changes in the Constitution and administrative machinery of the universities. Accordingly such changes were introduced in the Constitution of the old Universities and were incorporated in the Acts that established new Universities. The Universities were thus provided with suitable instruments for the pursuit of the higher ideals of teaching and research. A vigorous start was made in Calcutta when Sir Asutosh Mookerjee became Vice-Chancellor and during the time that he held this office, a number of departments of post-graduate studies and research were started. A small beginning was made in Bombay by the establishment of a University School of Economics and Sociology. To this came to be added first a department of chemical Technology later and other departments such as Statistics, Civics and Politics. More are planned under the Centenary Development Programme of the University.

The courses leading to the first degree which were taught in the affiliated colleges of the Universities have also been progressively revised from time to time, so as to meet the needs of changing times. About fifty years ago in Bombay there was a three years' degree course after the Matriculation for Arts and Science and there were just four branches for the Master's degree namely—(1) Languages, (2) History & Philosophy, (3) Mathematics and (4) Natural Science. These courses were revised and a four years degree course came to be adopted for B. A. and B. Sc. The number of branches for

the Master's degree was also increased from four to five by splitting the group of Natural Sciences into two branches of 1 physical science and 2 Natural Science. In 1910 honours courses were instituted for the B. A. degree and these were separated from the pass courses. The importance of the study of Commerce as a university subject was recognized and a separate degree called B. Com. was instituted. The Commerce courses have undergone revision from time to time to cover newer and newer developments in this branch of knowledge. Recently on account of its importance a separate faculty for this branch called the Faculty of Commerce came to be constituted in Bombay and a Master's degree called M. Com. was instituted.

The study of science under changing times received greater appreciation. A separate Faculty of Science was instituted. The courses were made more extensive and practicals were given greater importance than before. A separate Master's degree was instituted in Science.

Importance of research both in Arts and Science came to be recognised and students were permitted to take their Master's degree in Arts and Science wholly through research. Doctorates were also instituted in Arts and Science, Ph. D. for guided research and D. Litt. or D. Sc. for published work which was considered a distinct contribution to human knowledge.

Changes such as these for the improvement of courses and encouragement of research naturally led to the expansion of the Libraries and Laboratories of the colleges and the universities and this gave considerable fillip to the study, particularly of Science. The number of students taking Science has grown considerably.

Some years ago, a complete separation after the Matriculation between Arts and Science courses came to be introduced and the degree courses in Arts and Science were suitably revised. Now there is a feeling that the separation of Arts and Science courses leads to a lopsided development of young minds and it is felt that the courses should be further revised by the introduction of general education in the courses leading to the first degree in Arts and Science.

In the Faculty of Engineering in Bombay about fifty years ago, there was a three years' degree course. Students were admitted to this course after their Matriculation and the course comprised only of Civil Engineering. The standard of admission was soon raised to the previous, corresponding to our First Year Examination. In course of time the standard of admission was further raised to the Intermediate Science Examination and the name of the degree was changed from L. C. E. to B. E. The courses were greatly revised and provision was made for alternative courses for B. E. in Mechanical and Electrical Engineering. Recently all these courses were overhauled and brought up-to-date to include training in the most recent developments in the theory and practice of Engineering.

About 1890, under this Faculty a diploma in Agriculture to be taken after a three years' course was instituted. About 1900, the diploma course was changed into a degree course which could be taken in three years after the previous examination. The degree was first called L. Ag. and subsequently B. Ag. and in more recent times B. Sc. (Agriculture). A Master's Degree was available for Engineering from early times. But a Master's Degree was instituted in Agriculture more recently. About thirty years ago in Bombay a separate Faculty called 'The Faculty of Technology' was instituted to include Engineering, Agriculture and Chemical Technology.

In the Faculty of Medicine equally extensive and progressive reforms have been carried out from time to time. Originally, students on passing their Matriculation were admitted to the Medical Course. Later on, the standard of admission was raised to the First Year and then to the Intermediate Examination in Science. The name of the degree first was L. M. & S. which was subsequently changed to M. B. B. S. Master's degrees were also instituted in Medicine and Surgery. In more recent times it has been made possible for the medical students to take M. Sc. and Ph. D. in their special branches of science. Post-Graduate diplomas in the special branches of medicine and surgery have been instituted. These courses have also been revised from time to time and brought

up-to-date. Medical studies of our times in the Universities are far more advanced than in the past and this is only natural, considering the nature of medical science which every day is growing and expanding with ever accumulating experience.

In the Faculty of Law also changes have been made from time to time in our Law courses. The Law course has in recent times been made a full-time course and students are allowed to join this course after their Intermediate Examination. Only, they have to take a Law preliminary examination before they are allowed to proceed to the proper legal studies leading to the degree examination. There is a Master's degree in Law available to Law Graduates. Due importance has been given in the courses to the study of Constitutional and International Law.

With these changes in the courses in various branches of knowledge, attention has also been paid to the important questions of reform of the examination system. Thus it is now possible for students to pass their examinations in parts by a system of exemptions. The problem of the form of questions and the answers expected has also received a good deal of consideration. Similarly it is considered undesirable that a student's future should be decided only on the results of the final examination at the end of the year and it is held that due weightage should be given to the work of the student throughout the year in assessing his performance in that year.

Much more attention is now paid than in the past to physical training of students. P. T. is made compulsory for students of first and second year classes. The U. O. T. C. now called N. C. C. has been also expanded to provide facilities) for a larger number of university students, of initiation in Military exercises and discipline. Sports also have been receiving greater and greater attention in the Universities and so are other extra-curricular and cultural activities.

Thus in all spheres of Primary, Secondary and Higher education we have advanced considerably from the early beginnings during these one hundred years of Modern Education. Evidently further progress still can be and has to be achieved. There is room for such progress, and educationists

everywhere are anxious to advance and achieve further results in the reform of education. The story however, of the progress achieved in these hundred years is surely impressive. If critics are found to be little it we can only say that they are guided in their estimate by, perhaps unavoidable, prejudices.

GEOGRAPHY IN INDIA

By : C. B. JOSHI.

The International Geography Seminar at Aligarh sponsored by the Aligarh University in January 1956 may rightfully be considered a landmark in the development of Geographical studies in India. Representatives from Russia, China, Egypt, Germany, England, Australia and America and other foreign States, as well as the representatives of practically all the Universities in India attended the Seminar. Impetus to the study of Geography was first given by the University of Aligarh by starting its Post-Graduate Department. Since then one University after another has made provision for the degree teaching and for the Post-Graduate Teaching in Geography. The University of Madras instituted the Diploma course in Geography in 1932, and it was further expanded and re-constituted as a Department of Study and Research in 1938. The University of Calcutta made arrangements for the teaching of Geography in the University soon after. After the Second World War, the importance of the study of Geography was appreciated by many Universities in India and as a result, arrangements for the teaching of Geography in the Graduate and the Post-Graduate Classes have now been made in practically all the Universities in India. About six different Universities have departments headed by Professors of Geography and a few others have appointed Readers as heads of departments. In the State of Bombay, the Poona and the Baroda Universities have established departments of Geography. Since 1952, arrangements were made in Poona for teaching Geography as a Principal subject for the B. Sc. and by

1955 the Post-Graduate course was started. The Baroda University also started its department for Post-Graduate teaching in 1955. Geography was introduced in the First Year Course in the Arts Faculty in the University of Bombay as early as 1937. But it was only in 1944, that the subject was allowed to be taken as a Subsidiary subject in the B. Sc. course, and it was in 1954 that it was given the status of a degree subject. Arrangements now have been made for the teaching of Geography both at the M. Sc. and the M. A. Examinations. No steps have, however, yet been taken by the University to start its own department of Geography.

The importance of Geography as a separate subject for University study has now been recognized by practically all the Universities in India. However, the question as to which faculty this subject can be profitably assigned has not yet been finally decided. In some Universities the subject belongs to the faculty of Arts, in some others it is included in the faculty of Science, while in some Universities the subject is assigned to the three faculties of Arts, Science and Commerce. During the last 50 years, Geography was being taught at the school level. Sometimes it was taught as an independent paper while at other times it shared a paper with History. The main difficulty in the proper teaching of the subject in schools has been the difficulty of finding properly qualified teachers in sufficiently large numbers. This difficulty of finding suitable teachers is evident even today. It has now been conceded that if Geography is to be taught in schools, it must be learnt in the Universities. It is hoped that by the institution of a degree in Geography in practically all the Universities in India, it would be possible for the schools to find teachers qualified to teach the subject on modern lines. University education in India has been more or less following the pattern of British Universities. It is no wonder, therefore, that Geography has been receiving scant courtesy and belated recognition from fellow teachers of both natural and social sciences, because similar was the fate of Geography in Britain.

It is interesting to observe the course of the Geographical

renaissance in Britain. The Royal Geographical Society which was founded in 1832 had been making efforts to develop the study of Geography on proper lines and as early as 1871, the Society had sought to secure the recognition of this subject at Oxford and Cambridge. As a sequel to the report of Sir John Scott Keltie in 1886 the Oxford University gave recognition to this subject in 1887 and the University of Cambridge followed in 1888. Since then the students of this subject had to fight a long battle to gain recognition as an independent discipline having its own technique and its own method. The battle was started by Professor H. J. Mackinder when he delivered his paper "On the Scope and Methods of Geography" at the Royal Geographical Society. No modern teacher or student of the subject can fail to find Mackinder's discussion topical and relevant. He defined Geography as a Science whose main function is 'to trace the inter-action of man in Society and so much of his environment as varies locally' or alternatively as 'the science which traces the arrangement of things in general on the earth's surface considering what relations hold between distribution of various sets of features on the earth's surface and what are the causes of their distribution'. Both statements are arguable and did not meet with uniform favour at the time. Yet the success of the initiative of which Mackinder's paper was essentially the opening statement can be judged in the light of the following figures. In 1955, there were over 1700 students reading for Honours Degree in Geography at the British Universities and over 200 Post-Graduate students. There are at present 29 Chairs of Geography in the British Isles. The first of these was established at the University College, London, in 1903. The second was established at Liverpool in 1916. Full recognition was not achieved at Cambridge till 1931 and at Oxford till 1932. The years since 1945 have seen a marked expansion with the establishment of no fewer than 12 Chairs in British Universities and Colleges.

As in England so in India, the subject has to fight its battle for recognition in the University. Geography shares a perimeter not only with natural but with social sciences. It is a

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social science in so far as it concerns itself with an expression of man in area. Similarly we may say that Geography is a natural science in so far as it concerns itself with the expression of natural phenomena in area.

Only two questions really arise concerning the validity and worth of Geography as a science. Is its programme philosophical, rational and desirable and does the application of its method lead to results interesting and practically useful in themselves ? The general position on this question has been well stated by Hettner as follows :

“Reality is simultaneously a three-dimensional space which we must examine from three different points of view in order to comprehend the whole; examination from but one of these points of view alone is one-sided and does not exhaust the whole. From one point of view we see the relations of similar things, from the second the development in time and from the third the arrangement and division in space. Reality as a whole cannot be encompassed entirely in the systematic sciences, sciences defined by the objects they study, as many students still think. Other writers have effectively based the justification for the historical sciences on the necessity of a special conception of development in time. But this leaves science still two-dimensional; we do not perceive it completely unless we consider it also from the third point of view, the division and arrangement in space.”

The essential truth of Hettner's thesis is now accepted by all scientists; yet even today the attitude of teachers of natural sciences towards geography is only of an easy going tolerance. Since Geography departments exist, there must be presumably something worth studying inside them. It would appear indeed, that scientists as a class are not at all keenly aware of Hettner's third point of view, viz. the study of the arrangement and division of phenomena in space. Their possible reply would be that they feel quite capable of dealing themselves with the geographical aspects of their own subjects. This claim, however, cannot be substantiated in fact.

The point at issue is well exemplified within the boundaries of the science of Geology. Geology does, or at least Geology can,

embrace within its confines the three points of view distinguished by Hettner; it deals in an analytical classificatory way with special classes of objects, minerals, rocks and fossils, but it is also both an historical and a geographical study, in Hettner's sense. The Geologist, however, is showing a tendency to magnify the importance and prestige of laboratory work at the expense of the non-laboratory aspects and as a result has neglected what may be broadly called the historical and geographical aspects of that subject. By such neglect Geology is in danger of surrendering its cultural heritage and of becoming a mere appendix to crystal physics. Whatever be the value and validity of the geographical point of view, in geology it is essential to affirm its necessity and importance as a general method. The synoptic, comparative view of phenomena, the carefully cultivated habits of seeing woods rather than trees, is one means of satisfying man's intellectual curiosity and his aesthetic urge to discern order and regularity in the world evolution. And if his aspiration is to interpret what he sees, to distil its significance, then the geographical method is an indispensable road to truth different from but supplementary to that pursued by the analytical sciences. Geomorphology is a subject covering the border land of geography and geology. In England for a long time geologists have to some extent, though by no means wholly, rather contemptuously relegated it to geographers. In its home of origin, the United States, it claims rank as a separate subject but if that be its real role, it remains true that there is still possible a distinctively geographical approach to it and it has been well brought out by W. M. Davis. Davis threw much light on the earth's sculpture by studying land forms. It is because human patterns are so delicately related to surface relief that the geographer will never be able to divorce its study from geomorphology properly so called and his patient examination of the earth's external face will not only pose, but help to solve problems in the pure study of land's sculpture.

An entirely analogous divergence of aims and method concerns the relation of meteorology and climatology. Part of the field of meteorology has proved susceptible of mathe-

matical treatment and such part or parts are distinguished as physical and dynamical meteorology. The portion so segregated is a relatively small part of the field of reality compassed by our present knowledge of the atmosphere. Synoptic meteorology falls outside it and it will do so for a long time to come for it cannot be conceived that formal solutions to equations with so many variables are at all imminent. You cannot rigidly calculate but only helplessly observe the rate of progress of 'front.' The fact is held to derogate from the scientific stature of weather forecasters. This discrimination against natural phenomena, because they fail to prove amenable to mathematics, is nothing but scientific snobbery. Climatology in the words of B. Haurwitz and J. M. Austin is "Obviously closely related to meteorology and also to geography since the atmosphere is strongly influenced by the physical nature of its earth's surface." But to imply that geography has no more concern with or no more contribution to make to climatology is most misleading. Statistical or distributional climatology will continue to exist independently of the vagaries of air mass theory. Climatology will never be handled in a live and progressive manner except by men trained in geography whatever other training they may need. It is to be hoped that the Indian Meteorological office will open its doors to trained geographers and will thus be able to profit by their training.

If we turn to biology we find a similar tendency. In the opening lines of his *Types of British Vegetation* published over 30 years ago, Tansby quoted Drude of Dresden as stating that plants could be studied from three points of view and three only, the physiological, the phylogenetic and the geographical. This three-fold division is philosophically, closely accordant with that of Hettner applied to the whole field of knowledge. In the earlier stages of British work the geographical aspect—vegetation survey—was well represented. But recently, in certain quarters, the importance and success of work in plant physiology seems to have encouraged the notion that the line of progress by means of survey was worked out, and in any case was a rather inferior approach. Mr. W. Leach almost openly dismisses the geographical method in favour of labo-

ratory investigations. Such attitude has no justification. If survey is quite out of keeping with modern progressive tendencies in biological science, so much the worse for biological science. The geographers will certainly do the work of ecological survey not because they are minded to spend their efforts on unwanted parts of other men's fields but because natural vegetation is a vital part of the human environment and is closely linked with land utilisation.

So far we have discussed the relations of physical geography with other natural sciences. A geographer has to face a similar difficulty as regards the relation of geography with social sciences like history, economics and sociology.

In broad terms it is evident that geography concerns land and man. The field, therefore, can be approached from the side of either land or man and it is unprofitable to debate which is the better approach. 'Geography' wrote Vidal de la Blache, 'is the science of places not of men.' It is interested in the events of history in so far as these bring to work and to light in the countries where they take place qualities and potentialities which without them would remain latent. In its simplest essence, the geographical problem is how and why does one part of the earth surface differ from another. In one sense, it is profoundly true that the most important part of geography is the human part since without it the subject would lose its major role. But it is equally true that the foundations of the subject lie on the physical side and in building, foundations comes first, however, vast the super-structure. The physical aspects are basic to a full geography and for the good health and future prospects of the subject as a whole. The early advance of physical geography may be rated as a fortunate circumstance. It is true that even some geographers feel tempted to belittle the physical and to magnify the social aspect of geography. It is not uncommon to find teachers and students of geography who appear almost proud of the fact that they are weak in Physical Geography. The implication is that they have to their credit a notably better performance on the human side. It is this differentiation between sides which a real geographer cannot accept.

By the very nature of the subject, the geographer is protected from the perils of isolation and specialisation. Not for him the characteristics of one-eyed approach which has, it is true, its limited value if properly controlled, but carries with it the danger of producing a permanent squint. You may charge him over and again with too wide a view or too ready a generalisation and against these propensities he must be continually on his guard, but the subject requires wide views and to attempt generalisations is not easy. What matters is that they should be based on patient detailed work carried out with the thoroughness of true scholarship. The geographer's real claim is that he is attempting to see things together and that such seeing is an art not to be acquired without cultivation and training. The present need for integration in the divergent and multiplying fields of human knowledge is urgently acclaimed. Geography offers such an integration over part of the field and the character of its spirit and the manner of its service must be judged in the light of these facts. The claim of geography indeed depends upon the necessity of careful study of evidently significant phenomena in the field of the earth and the man. Our aim is to examine rocks, land forms, soils, plants as well as human phenomena in their natural contacts in area one to another and altogether. We need not deny that there are difficulties of method in such a study and permissible differences of emphasis in its pursuit. But the genuineness and the necessity of the method and point of view can be denied only by the ignorant or the perverse.

Geography in India can be what Indian Geographers make it. As we have said above, there is now provision for the study of geography in almost all the Universities in India, and in every University a qualified geographer is entrusted with the work. If we compare the syllabi in Geography in the various Indian Universities with the syllabi of this subject in the British or American Universities, we find they compare well. But when we look to the University products we find there is a great scope for improvement both on the quantitative and qualitative sides. Every teacher must see that a student gets properly trained in Physical Geography. In some Universi-

ties emphasis appears to be put on the study of Continents from the point of view of a world approach. What the student in India needs is a regional approach.

India is undergoing at the present moment a period of reconstruction. The Central Government in Delhi and the State Governments are pushing forth schemes of industrial and agricultural expansion. When such activity is being carried out briskly, the geographer should not and cannot sit idle. He must supplement the efforts of statistical, economic and Demographic experts by drawing their attention to the spatial regional approach. To the geographer 'Planning' would imply a conscious change in the relationship between man and his environment, of course for the betterment of man. The Geographer's main concern in planning is to examine the physical background, the stage, on which men and material are brought into play as envisaged in the Plan frame. In the United Kingdom regional studies such as the Land Utilisation Survey, the Scott Committee report and the like, have been successfully used for planning in wartime and peace. Similar effort has been made in Germany, Russia, and other countries. Regional studies must be planned and executed both from the macro-regional and micro-regional approaches. Shri Vinoba Bhave, the well-known Bhoojan worker uttered recently a timely warning to India's planners that unless they plan for villages, the planning effort would not be successful. He emphasised the urgency of the micro-regional approach. Strange, though it may seem, so far, we know very little with precision of the Geography of our land.

When Shri. Bhave recently paid a visit to Ratnagiri District this fact of lack of precise information was brought out clearly. Ratnagiri is a backward tract in many respects, but it is also a thickly populated district with a very low standard of living. If any concrete steps are to be taken by the Government to improve the position of the district, the first difficulty is the lack of data. The district has a laterite soil and is supposed to be suitable for horticulture. The noted Alphonso Mango grows there well. But to-day, we have no data about the regional distribution of mango trees. The maps prepared

by the Survey of India throw no light on land utilisation. What is needed now is a detailed land utilisation survey of Ratnagiri District. It has a long coast line but no information is readily available about the fish types or about suitable fishing grounds. The district is divided by creeks and is lacking in all-weather good roads. The Koyna Valley Scheme is likely to produce electricity by 1962. The Ratnagiri district is adjoining this centre. Yet we have no data to suggest ways and means for using some portion of this power for the speedy development of the district. If cold storage facilities for the preservation of fruit are made available to this district, every ten miles or so such stores would enable the residents to keep mangoes and fish in good condition. They would thus help the growers of fruit and catchers of fish in getting a better price for their goods. But there is no data available about the quantities of fish or mango gathered in different parts of the district and consequently no concrete plans can be made as to their preservation.

The geographers have thus a golden opportunity to serve the cause of their motherland by presenting to the authorities detailed maps showing the distributions of data concerning the district. The population distribution map, the crop distribution map, the fish distribution map and such others can be speedily prepared and put at the disposal of the Planning authorities.

If the geographers have to contribute their share they will need first of all an organisation. A research institute for regional documentation and studies is the first prerequisite. There are several areas in India to-day which are urgently awaiting development. Such economically backward tracts ought to be surveyed and such surveys would help our planners. In fact it is not an exaggeration to say that from the point of view of planning, much of our land remains an unexplored territory. It is the role of geography to discover this India through its discipline and methodology and thus make its contribution to the nation's progress.

8

TRENDS IN UNIVERSITY EDUCATION (IMPRESSIONS OF A FOREIGN TOUR)

By D. G. KARVE

From March to June 1956 I had occasion to visit Universities and to meet University men in about ten countries of the world. These ranged from Burma and Japan in the East, to Italy and Sweden in the West. I visited four Universities in the United Kingdom and at least double that number in the United States. My interest was primarily in training in research methodology, with special reference to problems of rural development. Planning and public administration were other fields in regard to which I had opportunities of exchanging ideas with University men in several places. In a few cases my visit happened to coincide with important academic gatherings which I was invited to join, and which gave me an opportunity to see our colleagues abroad in their normal social as well as professional behaviour. All these contacts constitute an experience which is at once enlightening and reassuring. A few of my more vivid impressions may be of some interest to colleagues in India.

I landed in San Francisco two days previous to the 88th Charter Day of the University of California. On the day of my arrival I visited Stanford University which is in the neighbourhood. In the Hoover Library attached to the University, a collection of literature bearing on 20th century history is maintained. I thought I was playing an ace card when I asked them whether they have copies of the *Servant of India*

for the period for which it lasted. Without registering any surprise the Librarian said that he would find out and began fingering through a catalogue, and there it was, entered with suitable numbers and columns. Realizing that I had, in a way, lost the trick, I thought of playing the next card. In a casually phrased question I mentioned that probably in March 1935 I had contributed an article which had some bearing on the evolution of the British Commonwealth and the position therein of dependent parts of the Empire. This query was sufficiently minute to be turned over to a reference officer who confronted us with the appropriate issue and index note before we had finished with the other exhibits in the hall. It is noteworthy that India was not at that time within the major sphere of the Library's interest, and yet method and organization were adopted with so complete an efficiency that scholars could obtain access to even relatively obscure sources with certainty and quickness.

I saw many interesting things and came away with many useful suggestions from my experience in California. Two or three among these, I recall with special interest. Mrs. Bauer, wife of the Dean of the Department of Architecture at Berkeley, was working on the problem of industrial location and city planning. The whole issue arising out of a comparative study of individual advantages and collective costs, economic as well as social, was presented by her in a critical as well as constructive manner. While the thesis of a phased replacement of traditional small-scale crafts by superior technology practised in large factories was not much appreciated by her, the policy of planned decentralization of industry round comparatively modester towns and cities was being strongly advocated in her thesis which was then nearing completion. On the subject of state sponsoring of economic rehabilitation and development, Prof. Paul Taylor could easily appreciate the needs of underdeveloped countries by reminding himself of the period of inter-war depression in U. S. A. It is true that I found a fair number of neoclassicists in American faculties of economics who enjoyed their ivory-tower privilege of disclaiming all state action in

the economic sphere even by way of tariffs. But in America, more than in any other country, I found senior scholars more appreciative of the historical and institutional aspects of economic policy than elsewhere. In fact, in another American University, Chicago, I received an agreeable shock when Prof. Schulze almost took the words out of my mouth by asserting that he interprets India's current emphasis on planning as a natural reaction against the long period of governmental neglect of the country's economy during British days, and that it would be fair to expect that in due course the positive role of the state would be taken for granted, and more and more emphasis will be turned on to the efforts of individuals and private organizations to utilize public assistance to the best possible advantage of the nation. This is illustrated by the economic history of the U. S. A. whose current advocacy of private enterprise has to be seen against the historical background of a massive support of public resources and policy.

To University men everywhere another experience of mine at San Francisco would have much appeal. The Students' Union of the University of California has an annual fixture. Every year an alumnus of the University who has distinguished himself most is chosen as the recipient of a special award. The actual award is made at a reception following the Charter Day Dinner, and for the majority of members and guests it is a well-guarded secret till almost the last. I was at a table where fairly influential persons, including the Vice-President of the Rockefeller Foundation, were seated. None of them appeared to know who the recipient would be. When the President of the University, therefore, announced the name of Mr. Walter A. Gordon, then Governor of Virgin Islands, and a coloured gentleman, as the most distinguished alumnus of the year, a hush fell on the audience for a few brief seconds, only to be followed by a resounding explosion of enthusiastic cheers. That was a moment worth cherishing. But another equally stirring was to follow. When Mr. Gordon rose to make his acknowledgements, after saying the usual polite things, he developed a mood of solemn stock-taking of his associa-

tion with the University. He said that he always felt proud and grateful for his membership of "the University which has taught us not what to think, but how to think."

The year's Charter Day synchronised with the Silver Jubilee of the President's association with the University. To celebrate the event, among other things, an honorary degree was conferred on his wife for having helped her husband to be President for twenty-five years. Speaking about Presidents of American Universities, representation of academicians among them is so small that persons connected with a University which has an academic president, e. g. Harvard, mention this as a special distinction. As a rule presidents are of the 'popular leader' type, more often than not wielding considerable influence in state or city politics. The faculty members often make it clear that they are not of the same type as the President, and that they are in a class by themselves.

This, moreover, is intimately connected with the American concept of a University. Perhaps with the exception of the older Universities which are described, not always flatteringly, as the Ivy League, Universities are treated both by themselves as also by the community as socially useful institutions in a very direct way. The employment angle is very definitely kept in view and whether it is an agricultural, industrial, mechanical or social problem, persons concerned and, where it is the whole community, the government itself, look to the University to offer practical assistance. Excepting purely methodological and abstract subjects, University scholars have on the one hand the advantage of close contact with the corresponding sector of practical affairs, and on the other the responsibility to justify themselves to their patrons. In a very real sense the Universities have to earn their keep. So long as they are doing this on their total results they may continue to have either independent or supporting fundamental studies. It is not suggested that the approach is purely mercenary or materialistic, because it is definitely not so. But even knowledge and scholarship are valued more for their practical use than for their uniqueness. This is broadly true, whether an institution is state-supported or not.

At this stage there is an impression of mine which I feel like recording for what it is worth. It will obviously be wrong to ignore the fact that under the overwhelming neurosis of anti-Communist fear the freedom of academicians in whatever may appear to be pro-communist thought or activity has been restricted almost with a zeal reminiscent of popular fury against witchcraft in the mediaeval ages. It will equally be out of place not to be aware of some broad limitations of ideology or interest which patrons, either state or rich people or religious endowments, place, implicitly if not explicitly, on institutions supported by them. Such influences are to be found in almost all countries. But obviously even these tenuous influences are confined only to a few faculties of social sciences, and even there as far as I could gather little general sympathy was expressed for the restrictionist school.

On the other hand a certain uneasiness as to whether the U. S. A. are really appreciating world events in correct perspective is seen in all discussions. In a large number of institutions special endowments for the study of world events have been made. These offer to study foreign and regional cultures and problems by means of organized research in which overseas scholars are invited to join. Centres like the India projects in Harvard and Cornell are typical of a wide variety of area studies in American Universities. In almost every University visited by me I had to conduct one or more seminars on Indian conditions in which faculty members participated very actively. There are a number of research projects going on where active co-operation among Indian and foreign scholars is being utilized for the more systematic study of important theoretical and practical subjects. It is no exaggeration to say that American Universities have opened out a new dimension of University studies on a really universal basis by organized co-operation among scholars from several countries. The promise of this "University of Scholars" promoting the cause of learning as well as of world unity is most encouraging.

In European Universities generally, and in British Universities in particular, one quite easily senses a still lingering

attitude of orthodoxy. Some of their scholars seem to be so obviously convinced that what they have been doing for centuries is right, that even the suggestion of any other way of looking at things being right appears to them as heresy. To take an example, American Universities easily appreciate a proposition such as that a problem-solving approach to social studies would be increasingly in keeping with the social purpose of organized education. Such an attitude is perfectly consistent with equal support of analytical and fundamental studies. That you can be more practical without being less theoretical, an American scholar would easily see. But a suggestion to an English such as Dean that studies in Agricultural Economics may more purposefully be centred round current problems of agriculture, draws a quick retort that it is no part of University education to be involved in current controversial subjects, and so long as University training imparts to the scholars a sound grasp of principles and analysis they can be trusted to pick their way in the variety of problems with which later on they will be faced. This scholastic or classical attitude towards learning is much less ready to experiment with unfamiliar hypotheses than the more actively inquiring mind of American scholars. At least in social sciences I carried the impression that American scholars would receive almost any plausible hypothesis with a statement of "who knows, it may be true. Let us try," or at least "Let them try". To date, communism appears to be the only exception to this rule !

At first glance, it is a little surprising that a nation so new as the United States should have taken so enthusiastically to the promotion of research in sociology, or in social anthropology as they call it. Probably, it is the diversity of tradition and culture witnessed among immigrants, as well as among settlers in different parts of America, North and South, that has encouraged the study of human behaviour and institutions under varying conditions. First-hand contact with a variegated and changing social pattern has nursed a spirit both of inquiry and tolerance. While the Americans, like every other nation including India, are prone to self-esteem

there is, as a rule, no trace of racial arrogance. It is widely recognized that internally and internationally, serious differences exist in respect of rehabilitation programmes. At least in University circles these are treated as aspects of cultural and economic adjustment in the solution of which sociological studies are expected to be of real assistance. Though I disowned any competence in sociology as a discipline, I was often invited to participate in discussions regarding Indian Society. On all these occasions I found fellow-participants ready to meet an argument with more than ordinary sympathy and understanding.

From East to West, which for me was all East inasmuch as I started with Burma and never ceased going East till I returned to Santa Cruz Airport in Bombay, I had occasion to discuss with University men problems of international economic relations. In almost all the major countries scholars generally appreciated the compelling logic of developing science and technology. For peace as well as prosperity unless the resources of the whole world were organized and utilized on a common basis of equal partnership no nation, however powerful, would be able to enjoy either of these. Peace and prosperity are both indivisible, and if they are to be commonly shared by peoples of the world an equalitarian relationship was needed not only internally but internationally. To build such a relationship it is more urgently necessary to establish a firm understanding of one another's view-points, value-systems and essential wants than to set about framing organizational structures. Universities in countries which have either fared ill in the last War, or have been left impoverished even in success, are not devoid of some focal centres of such consciousness of world-culture, but by and large I found them still fondling hopes of raising themselves to "dominant" positions. It is more than probable that this feeling is only the extreme form of a passing phase of inferiority complex, and that it will wear off as soon as these nations strengthen themselves to their normal level. At least in one country, Japan, I found the younger generation in Universities fully alive to the equalitarian implications of the new world situation.

As, however, U. S. A. plays a leading role in current international relations, it was reassuring to find that most University men there are obviously going out of their traditional way to try and understand the physical as well as social situations in the rest of the world. For the time being it may be that the keen interest which they evince in Soviet countries, for which also they have special academic centres, appears to be devoid of that sympathetic understanding which is obviously brought to bear on their studies of the rest of the world. We know so much about the United States, and we know comparatively so little about Russia. It would, therefore, be wrong for academicians to try to evaluate current academic estimates in U. S. A. of happenings in Soviet lands. But apart from individual judgments, the most encouraging thing for the prospects of a world community is that no pains are spared to know the truth, even about Soviet lands.

Japanese professors analysing the implications of the new position of their country in the cultural and economic life of the world, especially of Asia; quite a few American professors preoccupied with problems of growth, especially of under-developed countries; some other of their colleagues grappling with the problem of guaranteed minimum of agricultural prices, and a few others toying with the idea of U. S. A. declaring in favour of free, instead of freer, trade; British professors adjusting themselves to an economy in which colonies are fast vanishing and scientific leadership has to be shared with several superior competitors; Swedish economists keeping in daily touch with movements of an integrated national economy subject to elastic but effective public regulation; French economists straining themselves to the utmost to keep some kind of order and continuity, more through administrative than through legislative channels, in the nation's programmes of development; Italian professors ranging themselves on either side of two schools of land-reformers, one selective and the other extensive; and Greek professors trying to answer the charge of administrative reformers that the University people think too highly of themselves to be drawn actively into the task of reformation of techniques by farmers and artisans,

are some of the highlights of an experience of Universities round the world grappling with national problems with a full consciousness of their implications for the rest of the world. I leave it to my colleagues here to say what we are preoccupied with and how we relate our immediate preoccupations with the national and international trends of human welfare.

9

THE QUANTUM THEORY

By V. N. KELKAR

For over a decade, Professor Max Planck, a celebrated German physicist, was struggling to derive theoretically an equation for an experimentally obtained curve giving the distribution of energy in the spectrum of a perfectly black body. A perfectly black body is a complete radiator and a complete absorber of all wavelengths. On account of its property of complete absorption of all wavelengths, it is called a perfectly black body. Even the blackest body on earth falls a little short of a perfectly black body as defined above, though lamp black is a very close approximation. In practice, a perfectly black body is realised by a cavity enclosed by solid opaque walls of any material. When the walls are heated, radiation of all wavelengths is emitted. This radiation fills the cavity, is absorbed by the walls and is re-emitted. A kind of dynamical equilibrium sets in and the energy density reaches an equilibrium value depending only on the temperature and is independent of the nature of the material forming the walls of the cavity.

A sample of this radiation is taken out through a small aperture in the walls of the cavity, spread out into a spectrum and the energy density at various wavelengths is experimentally measured, giving the well-known bell-shaped curve. Max Planck wanted to deduce an equation for this curve. He succeeded in doing this but he was forced to make certain assumptions which were against all classical ideas on the matter. This raised an uproar amongst the physicists of the day, who abhorred his ideas and were naturally not inclined to accept

them. However, as more discoveries were made in course of time, it was realised that Planck's novel ideas were essentially correct and had to be accepted.

Planck assumed that the radiation was emitted by microscopic atomic oscillators just as sound waves were due to the vibrations of some material body. According to classical ideas, the energy of an oscillator should be proportional to the square of its frequency. Planck was forced to conclude however that in the case of these atomic oscillators the energy was proportional to the frequency. Further these oscillators could possess energy which was an integral multiple of a fundamental unit and did not vary continuously but in discontinuous steps. This was another point of departure from classical ideas. If E is the energy and ν the frequency, the energy was given by :

$$E = nh\nu$$

where n is an integer and h is a universal constant now known as Planck's constant. Dimensionally h is seen to be of the nature of a physical quantity called action which is the product of energy into time.

Thus the action of an atomic system varies discontinuously and takes only discrete values which are integral multiples of a definite unit h . The action is, therefore, atomic in nature.

Once this atom of action or quantum of action was discovered, it turned up again and again in several different phenomena. Soon after the discovery of Planck, Einstein put forward the idea of a photon or a corpuscle of light having energy equal to $h\nu$. A beam of radiation of frequency ν , is a swarm of photons, each having energy equal to $h\nu$; This hypothesis was 'beautifully' confirmed by photoelectric phenomena wherein it is found that when a metal is illuminated by light, one photon ejects one and only one electron and the maximum energy transferred to the electron is $h\nu$.

By a brilliant stroke of genius Niels Bohr of Copenhagen, a Dutch physicist applied these ideas to a hydrogen atom. In a hydrogen atom an electron moves round a positively charged nucleus called the 'proton'. The electron moves only in such orbits for which the action is an integral multiple of h . The

smallest orbit which corresponds to the normal state of a hydrogen atom has the lowest possible action namely h . Bohr's simple mathematics laid the foundation of modern spectroscopy.

The discovery of a universal constant is always a matter of deep significance. Nature, it is said, neither reveals nor conceals. In a sense however nature reveals itself through these universal constants. They have to be properly interpreted so as to give a coherent picture of reality. Einstein's theory of relativity may be epitomised by the discovery of a universal constant c . Whatever the motion of the observer, the velocity of light as measured by him is always constant and equal to c . Here light happens to be our fastest signal, or messenger. A physical signal may consist of matter which is energy in a tangible form, moving from one point to another. It may, on the other hand, consist of light or radiation, which is energy in an intangible form. Whatever the nature of the physical signal, it can never travel with velocity exceeding the value c , which is, therefore, the superior limit to the velocity of a physical signal. Now velocity is determined in terms of distance (or space) and time. Space and time were considered to be two independent entities. They are actually welded together or fused together so that they are the two aspects of another entity which is closely related to the nature of reality. Yet this entity remains unnamed to this day as it does not appeal to our consciousness. We see, but in parts like the six blind men of Hindustan trying to see and describe an elephant. The story of h the universal quantum of action follows similar lines and reveals the true nature of reality.

Physics is essentially a science of measurement of a large number of physical quantities. Every physical quantity has two aspects, a qualitative one and a quantitative one. Physics does not generally admit a quantity which it is impossible to measure. Those that it can measure are again of two types. Some are absolute and some are admittedly statistical in nature e. g. temperature. Anticipating the results we see that such distinction is not really tenable. All physical quantities are ultimately statistical in nature, being derived from a study of

large scale phenomena. All physical measurements are based on the measurement of certain fundamental quantities. Length (or space), mass and time are usually taken as the basic undefinables of physics. It is these which are revealed to be ultimately meaningless and have only a statistical significance.

One of the basic principles of classical physics is that an experiment, however many times repeated, always yields the same result. This is not, however, really true. The act of experiment always leaves an indelible mark on the system subjected to measurement. If the principle appears to hold in practice, it is because we are experimenting on a system which is sturdy enough to withstand the wear and tear of experiment. A stone pavement becomes smooth and polished when walked upon a million times. This is easily seen to be the result of a slow accumulation of the wear and tear caused by the simple experiment of walking upon it. Light is known to exert a pressure, but the walls of a room are not observed to recede when we switch on a light. This is because the walls of a room are too sturdy to 'show' any such effect. The case is, however, different when we experiment upon a microscopic system. An electron suffers a violent recoil when shined upon by light. Arguing along these lines Werner Heisenberg, another German physicist, showed the impossibility of performing even a single experiment upon a microscopic system without disrupting it by the very act of experiment. The case is best illustrated by taking a simple example. Suppose it is required to obtain the position and momentum of an electron. The position is measured by observing it with a microscope after illuminating it with light of very short wavelength, as the measurement becomes more accurate with light of shorter wavelength. But even with such an ideal and imaginary experiment all that we can do is to determine within somewhat narrow limits the position of the electron. A true pin point determination cannot be made. The error or uncertainty in the measurement is say Δx . Now the shorter the wavelength of the light used to illuminate the electron, the more violent is the recoil the electron suffers as a result of the collision between it and the light photon. The momentum of the electron

is greatly changed and the uncertainty in the momentum Δp becomes very large. Luckily the two uncertainties are not unrelated. Their product is equal to the quantum of action h . This is the famous Uncertainty Principle formulated by Heisenberg. In the form of an equation it becomes

$$\Delta p \cdot \Delta x = h.$$

The uncertainty principle implies that the position and momentum of a fundamental particle like the electron can only be 'estimated' and 'not measured' in the usual sense. We have come down to the limit of what is absolutely small and the errors or uncertainties have become identical with the measures of the quantities themselves. The impossibility of making measurement is the consequence of our seeking to find out and measure what is not there. An elementary diffuseness, an aberration, a want of sharpness pervades the whole microscopic world. An electron simultaneously possesses an extension and momentum. The two aspects cannot be divorced from each other, although their magnitudes can be varied. You cannot ascertain the absolute location of an electron and the momentum cannot also be made absolutely zero. It is impossible to bring an electron to absolute rest as its position cannot be made infinitely uncertain. Space and momentum are two inseparable ingredients in the physical make up of a fundamental particle. The quantum of action is like a bud, uninteresting in itself, but it always blooms forth into a flower with two petals whose sizes may be variable but are subject to the condition that their product is a constant. Or h is like a dicotyledonous seed which on germinating always puts forth two cotyledons.

The quantum of action h unfolds itself in a variety of ways. It all depends upon the problem and the nature of our inquiry. In the case of a photon, its energy E is equal to $h\nu$.

$$E = h\nu$$

$$\text{i.e. } \frac{E}{\nu} = h.$$

But $\nu = \frac{1}{T}$ where T is the corresponding period of the light wave.

$$\therefore E T = h.$$

This equation is really another form of the uncertainty principle and should be written as

$$\Delta E \cdot \Delta t = h.$$

A photon of light is, therefore, an amount of energy and a bit of time rolled into a quantum of action h . Energy and time are the essential ingredients of a photon. These ideas appear rather meaningless but they are essentially sound. It will thus be realised why it is said that to understand the implications of the quantum theory one must set aside one's commonsense.

The hydrogen atom provides another illustration. In the normal state the action of the system is h . In the language of mathematics, this reduces to an equation

$$2 \pi r m_v = h$$

where m_v is the momentum of the electron and r is the radius of the circular orbit. Now $r m_v$ is the moment of momentum or angular momentum say U .

$$2 \pi U = h.$$

Once again the uncertainty principle appears here to have the form

$$\Delta \phi \cdot \Delta U = h$$

If there is a nicely and critically balanced system in nature, it is a hydrogen atom in its normal state. You cannot perform even a single experiment to determine the position and momentum of the electron without breaking up the system. The last straw, it is said, breaks the camel's back. Unlike the conventional camel, here it is the very first straw that breaks the camel's back. The motion of the electron cannot be described at all in terms of the usual dynamical variables with which we are familiar. We have here to face an insurmountable difficulty. We have two courses open to us. Either to give up the attempt to describe the motion altogether or make the best of the situation by making a compromise. The former course has been adopted by Heisenberg, Born, Jordan and others. They do not attempt to form a mental picture of the electron's motion and regard it as irrelevant. They restrict themselves to quantities that

can be observed. A new mathematical apparatus has been devised with which calculation of observable quantities can be made. The latter course is to make a compromise and try to describe the motion as best as you can without making an experiment. It is possible to say that the electron is somewhere along the circle. The uncertainty in the angular position of the electron is, therefore, 2π . Hence $\Delta \phi = 2\pi$. The uncertainty principle then gives an estimate of the conjugate variable U. e. g. $2\pi U = h$. This is the well-known Bohr's condition of quantisation introduced as an *ad hoc* hypothesis.

The quantum of action is thus seen to be the fundamental grain of nature. However it makes no direct appeal to our minds. It holds within itself space, momentum, energy, time etc. in a rudimentary, embryonic form. When the action of a system is very large, it is possible to determine space, time, energy, momentum etc. in a satisfactory way. The quantum theory thus asymptotically agrees with the classical theory.

In the microscopic world, it is not possible to make any absolute prediction of what course the events will take as the initial data itself cannot become available. It is, however, possible to predict the probability of a certain event occurring. This has led many physicists to believe that the days of determinism are over—that order has been replaced by chaos and anything can now proceed from any cause. This is, however, a counsel of despair. True that the quantum theory does not allow us to make exact predictions. But this only shows our inborn shortcomings, the inadequacy of our minds to grasp the nature of reality. We are incapable of forming the necessary concepts and devising a suitable language adequately to describe the reality that transcends space, time, energy etc. Throwing determinism overboard, it is not necessary to embrace indeterminism in an unholy haste, as the quantum theory has neither proved nor disproved either of them.

10

AN ANCIENT LINGUISTIC TRADITION

By K. P. KULKARNI

1. Man and Language

Language is man's great heritage and a very ancient one. It is as old as man himself and is so much identified with him that there will be no language without man. It is also equally true that there will be no man without language. Every ethnic group, therefore, possesses its own language from the time of its birth and has consequently a linguistic tradition which is as old as the group itself. Though this is the case, still it is not always and with all groups, that its linguistic tradition can be proved to have been existing by direct evidence. There are very few ethnic groups that are lucky enough to possess evidence by which their linguistic traditions can be traced back to the commencement. The Aryans, especially those that migrated from their original habitat, whatever it might be—either the North Polar region or the Central Europe or the Central Asia and after sojourneying through various countries, came and settled down in India, do possess a linguistic tradition which can be taken back to the hoary times, on the strength of direct evidence.

2. The Aryans and their Language

The languages of the Aryans have got a unique advantage over other similar linguistic groups such as the Dravidian, Semitic or Mongolian, in possessing ancient records which enable us to trace their historical growth extending over a period of the last four thousand years or even more. Here

in our own home-land, the history of the Aryan languages goes back to the same antiquity if we consider the language picture as it obtains here in India. This group of the Aryan languages is thus not only unique in possessing substantial and reliable record, but is also unique in that that it has been a vehicle of the civilization of the people who speak it and have spoken it. We are thus able to get from these languages not only the history of the continuous growth of a language group but also the history of the culture of the people. The story of this group of languages spread as they are, both towards the West and the East, beginning from the old Indo-European to its modern congeners is simple and well-known. More so is it especially in the case of the Indo-Aryan group which is a linear linguistic evolution from the Old-Indo-Aryan (OIA) through the Mid-Indo-Aryan (MIA) to the New-Indo-Aryan stage (NIA). The mutual comparison of these languages, as also the recent data discovered by the minute and analytic study of the *sūtras* of Panini, have led scholars to fix up the characteristics of the most primitive stage of the Indo-European group. The fixing up of this proto-Indo-European language is a triumph of comparative and historical linguistic research. It is so to say, a romance in research, since the discovery of the capacities of Sanskrit by Sir William Jones (1786). This proto-Indo-European language is bound to be a hypothetical language as no direct records of that language are available.

3. The Proto-Aryan or Pre-Vedic

Let us now try to reconstruct this first link in the long chain of this linguistic evolution. The proto-Indo-European (PIE) or the proto-Aryan language had the vowels short, long and diphongal and also the semi-vowels. Of these, the semi-vowels must have been the first-created phonemes as is shown by the Paniniyan *sūtras* *hayavarat* (हयवरट्) and *achch gheh* (अच्च घे:) (7-3-119) which give priority to semi-vowels over the vowels. The h (ह) and the semi-vowels y (य्), v (व्), r (र्) were there first and it is from these that the vowels a (अ), i (इ), u (उ), ऋ (ऋ) were originated. This leads us to suppose that in that primitive proto-Aryan

language, the words ended in semi-vowels instead of in vowels. The words *deva*, (देव), *shālī* (शाला), *agni* (अग्नि), *pashu* (पशु), *pitr* (पितृ), *rai* (रै), *go* (गो), *nau* (नौ), ended in vowels in the Vedic language but in the pre-Vedic language they ended in consonants as *d/vah*, *shālāh*, *agnay*, *pashav*, *pitar*, *ray*, *gav*, *nav*.

3 (a). Its Vowel-Sounds

Then again in the proto-Aryan speech the vowels ā, ī, ū, ē, āī, ū, au had two pronunciations—one short and another long, as is borne out by Paniniyan sūtras *taparastatkalasya* (तपरस्तत्कालस्य) and *aden gunah* (अदेङ्गुणः) and *vriddhiradaicha* (वृद्धिरादैच). The vowel ṛ (ऋ) was also pronounced in different ways in the pre-Vedic speech. Sometimes in that speech two vowels were not coalasced as is clear from such words as *titau* (तितउ), *prauga* (प्रउग). The *visarga* in that ancient language yielded itself to various pronunciations such as h, r, s, sh, śh and at times as y and v also.

3 (b). Consonant—Sounds

The consonants in the proto-Aryan or the pre-Vedic speech must not have been pronounced in the same way as they were pronounced in the later Sanskrit language or as they are pronounced by us at present. There were, in the first place, no lingual or cerebral sounds in that language. The palatals also were pronounced quite differently. They seem to have sprung from the gutteral sounds under some peculiar circumstances. The dentals and the labials on the other hand, were probably pronounced as they are now pronounced in Sanskrit, Greek, Latin and Lithuanian.

3 (c). Its Morphology

The characteristics of the morphology of the pre-Vedic speech can be traced from the evidence offered by both the Vedic language and Panini's grammar. Sanskrit only of all the Indo-European languages continues the tradition of the proto-Aryan language in retaining eight cases, three numbers and quite a plethora of tense and modal terminations of the verb. The proto-Aryan speech was rich in terminations, in both nominal and verbal forms. This primitive Aryan speech "was essentially of a non-temporal character. Every verb-form expressed rather the 'how' than the 'when' of

a particular action. The past tense was shown by an augment which has come down to Sanskrit, Avesta, Armenian and the Greek languages. Old perfect did not show 'past'. The difference between the present and the aorist tenses lay in the manner of action. The future was hardly distinguished from the conditional. All these characteristics show that our proto-Aryan forefathers had not learnt to think beyond the present. The notions of distinct entities such as the present, past, future came later on with the growth of civilization." The primitive Indo-European people must have been composed of a number of tribes, each of which must have been using a dialect, a little varying from the norm, the vestiges of which have remained in the various optional forms that are found in the Vedic and other ancient languages. The word *d̄va* (देव) for instance, has for its dual *devau* (देवौ), and *d̄vā* (देवा) and for plural *d̄vāh* (देवाः) and *d̄vāsah* (देवासः), Instrumental plural *d̄vaih* (देवैः) and *devebhīh* (देवेभिः). The word *tasthivas* (तस्थिवस्) has three bases in its declension, the word *go* (गो) has four, the word *pati* (पति) has three, the word *dwi* (द्वि) has five, the word *tri* (त्रि) has also five and there are so many other words having more than one base. All these different bases of words lead us to infer that the proto-Aryan people had different tribes, each of which must have been using one of the above bases in the declension of the word. Panini later on, took cognizance of these varying forms current in the language and canonised them in his *sūtras*. This is more especially true in the case of the pronouns *asmat* (अस्मत्) and *yushmat* (युष्मत्). These pronouns must have been behaving very queerly in the proto-Aryan speech. They had more than twenty-one forms. Panini had to legalise these dialectal variations and for that had to formulate twenty-three *sūtras*.

3. (d) Its Vocabulary

With regard to the vocabulary of the proto-Aryan speech much work has been done by scholars who, by comparison of the vocables current in the several branches of that speech have successfully established the vocabulary though hypothetically. "There is a basic stock of words in each of the

branches, essentially identical both in pronunciation and meaning. In some cases, it is true, that there is a divergence. But all the same, the two circles of sound and sense being coincident, are not rare." The work done by Walde and Pokorny in this connection is remarkable. I give below some instances. The root meaning 'to do' is *Sk-kri* (क्रि), *Av-Ker*, *Old Per-Kar*, *Gṛ-Kac*, *Kro*, *Lith-cer*, *cre*. All these forms lead to establish the proto-Aryan (Indo-Europoan) root *Qer. Again the root meaning 'to see' *Sk-drish*, *Av-Darc*, *Gr-Derk*, *Lat-Draco*, *Got-Tarhjan*, *As-Torh*, give rise to IE root *Derk. The root meaning 'to ask' is *Sk-Prichh*, *Av-Perc*, *Lat-Prec*, *Prec*, *Lith-Praszan*, *Germ-fragen* give rise to the hypothetical IE root *Perc.

4. The Mittani or Hittite

We have so far traced the characteristics of the hypothetical proto-Aryan speech, the fountain-head or the mother speech of all the later Indo-European languages. This was the original mother language of the proto-Aryan people from whom the later Aryan races have descended. This proto-Aryan language had a number of dialects pertaining to the various tribes, varying in different degrees from the main language. These dialects in course of time, developed innovations which further on resulted in giving those dialects the status of independent languages. These dialects or languages are divided into Indian, Iranian, Armenian, Albanian, Slav, Baltic, Greek, Italic, Celtic and Germanic. To this list, may be added those languages that have been brought to light by later researches, in the Maryanni and the Mittani or the Hittite records and the Tokharian manuscripts respectively. That these languages belonged to the Aryan stock and that the speakers were a tribe of the Aryans is borne out by the linguistic and the cultural affinities between them. The Mittani and Kassites had introduced the horse-culture in Mesopotamia and the horse-culture was also a heritage of the Aryan race. This is also strengthened by another evidence found in the literary collections at Boghaz-Kuei. The library there contains a most interesting work by one Kikkuli from among the Mittanis which deals with horse. There are, in the book,

numerals and some technical terms which are almost Sanskrit, for instance, *ekavartana* (एकवर्तन), *panchvartana* (पंचवर्तन), *navavartana* (नववर्तन)—meaning one round, five and nine rounds. In the treaty—records found there at Boghaz-Kuei, there have been traced some names of kings which have a distinctly Aryan appearance. The names of these kings are :—*Sutarna* (सुतर्ण), *Parśuatar* (प्रशास्तर्), *Sauśatar* (सौशत्र), *Artadam* (ऋतधामन्), *Artasumara* (ऋतस्मर), *Tusratha* (त्विश्वथ), *Mativaza* (मतिवाज). The names of other dignitaries are also equally noteworthy—*Artamna* (ऋतमन्), *Bar-daśva* (वाधीश्व), *Biryāśure* (वीर्यसूर), *Puruṣa* (पुरुष), *Sainīśara* (क्षेमसर), *Satwaza* (सातवाज), *Suvardata* (स्वर्दात), *Indarota* (इंद्रोत) *Subandu* (सुबंधु).

These cultural and linguistic affinities show not only their racial kindred-ship but also point out to the fact that the proto-Aryan people in their eastward sojourn from the original habitat made a halt in the Central Asia from where they further on proceeded to Iran. This must have taken place just about between 2000 B. C. and 1500 B. C.

5. The Vedic and the Avesta

The group of Aryans which proceeded further on towards Iran, may be conveniently called the Indo-Iranian group from the territories which they subsequently occupied. These Indo-Iranians stayed together in Iran for a long time. Their common stay is proved by their common language. This common language came to be split into two branches, as the original tribe of Indo-Iranians got split into two—one Indic and the other Iranian. The dialect of the Indic people later assumed the form of the Vedic Sanskrit. Similarly the dialect of the Iranian branch became the Avesta. There are so many linguistic resemblances between the Vedic and the Avesta that both of them breathe the same spirit and possess the same genius. The Avestan language appears to be closer to the Vedic language than even the classical Sanskrit. The sister is more like her sister than her own daughter. The mutual resemblance is so close that any sentence from one can easily be transcribed into the other with a little phonetic change.

5 (a). Their structures compared.

This will be clear if we place some sentences from both, side by side. I shall take a quotation from Avesta—Yasna 10-8 and render it into Vedic Sanskrit.

1 Avesta :	Yo	Yaθa	Puθram	tarunəm
Vedic :	यो	यथा	पुत्रम्	तरुणम्
2 Avesta :	Haomem		Vandaeta	maśyo
Vedic :	सोमम्		वन्देत्	मर्त्यः
3 Avesta :	fra	abyo	tanubyo	haomo
Vedic :	प्र	आभ्यः	तनुभ्यः	सोमो
4 Avesta :	Visaite	baešazāi		
Vedic :	विशते	भेषजाय		

5 (b). Their Phonology compared

The difference in these two versions is only phonological. I give below some other phonetic resemblances : The Vowel *a* (अ) is the same in both Avesta and Vedic Sanskrit as in

Avesta	Vedic Sanskrit
a—āpatāt	अपिपत्ति
āshipaeoay	आक्षिपति
ă—Asman	अश्मन्

The vowel *a* (अ) is a weak and indeterminate vowel in some cases. In Avesta, it is called "schwa" a term taken from the Hebrew—a neutral vowel and is written by an inverted English 'e' as 'ə'

The treatment of the semi-vowels is again another common characteristic between the Vedic and the Avesta in their earliest stages. That the superlative Vedic form *shreśtha* (श्रेष्ठ) was pronounced actually as trisyllabic as *Srayiṣṭha*, is borne out by the Avestan form *Sraēsta*. The word *rēvat* (रेवत्) was pronounced as *rayivat* in Vedic times and this is corroborated by the Avestan word *rāēvat*. The behaviour of *v* (व्) in Vedic is somewhat different from the one in the Avesta. The words *varo* and *varena* in the Avesta have their counterparts in Vedic as *uras* and *Urṇā*. The behaviour of *s* sound before the vowels *i*, *u*, *r̥* and the gutturals, is another phonetic feature common to both Avesta and Vedic. The *s* becomes *sh* in both and in Sanskrit it further becomes the lingual *śh*. The superlative terminating 'isto' appears *ishtha* in Sanskrit

and *ishta* in Avesta. The Locative plural termination *su* becomes *shu* (शु) in Sanskrit and *shu* (शू) in Avesta.

5 (c). Their Morphology compared

In morphology also there are so many innovations common to both. The Vedic *tishthanti* becomes *histānti* in the Avesta, *sishakti* becomes *hišxti*, *iyarti* becomes (*uz*)*yaraṣ* in the Avesta. The Sanskrit present forms *dadāti*, *dadhāti*, *jahāti* become in Avesta as *dadaiti*, *dadaiti*, *zazahi*. The peculiar passive aorist form is another characteristic common to both—Sk—*awāchi*, *shrāvi*; Av—*avāci*, *srāvi*. The *u* (उ) of 3rd person singular and plural imperative is another termination common to both—Sk—*bharatū*, *bharantu* (भरतु, भरन्तु), Av—*baratu*, *barantu*.

The genitive plural termination *nām* or *ām* is common to both. The Vedic forms *martyānām*, *girīṇām*, *vasūām*, *pashūnām* have their counterparts in the Avesta as *māšyanam*, *gairnam* *vahūnam*, *pashuam*. The resemblance between the Avesta and the Vedic is seen to a great extent in the declension of the feminine ā stems in which the terminations of instrumental, dative ablative-genitive, locative, vocative singular are almost the same.

6. The Pre-Vedic Prakrits

Both the Vedic and the Avesta possessed a number of distinct variations belonging to different times and regions. It is natural that the most ancient Vedic agrees with the most ancient Avestan. Even among the two, the Avestan is more archaic than the oldest Vedic. The speakers of these two languages—the Indo-Iranian tribes of the proto-Aryan people settled in the region near Merve in Iran for a long time and then a branch of them proceeded further Eastwards to India and settled down there permanently. They were the forefathers of the present Aryan people in India. Their language was the Vedic which in course of time evolved into the classical Sanskrit. These Indo-Aryans possessed a literary record which no other tribe of the Indo-European people settling at other regions possessed. The record is not only the most ancient but also the wealthiest in point of both the linguistic and the literary content. This Indo-Aryan record is the famous Rigveda.

For the history of the languages of the Indo-European group, the Rigveda is undoubtedly the most important and the oldest known linguistic monument of the Indo-European people. The whole corpus of the Rigveda is composed of some 1024 hymns or the *suktas* arranged into ten *mandalas*.

7. The Vedic Language

The Vedic language further on developed innovations quite different from those of the Avesta. Some of its peculiar features may be mentioned, such as (1) the vowels coming in juxtaposition did not coalesce, (2) the *ā* of the diminutive affix was nasalised. (*abhra ā apah*), (3) the *s* came in to express genitive relation (*Vāchaspati, bhrihaspati, divasputra*), (4) the separation of the conjunct consonant *Vishvam* as *Viashuvam*, *swargo* as *suvargo*, *tryambakam* as *tryambakam*, *varenyam* as *vareniyam*, (5) that the Vedic language had some peculiar nominal and verbal forms quite different from those given by Panini.

The Vedic language was the central language current among the dominant cultured people and round about them there were dialects current among the masses. There must have been thus two parallel linguistic developments among the Indo-Aryans, occurring side by side in different strata of the community—one gradual and slow change in the dominant language of the Brahmins, restrained by the education and the tradition and the other rapid change and evolution among the masses. The slow developing language further on was stabilised by Panini and other grammarians so much that it became as it were a fossilized language and that is the classical Sanskrit. That the Prakrit languages must have been in use of the people side by side with the Vedic language is proved by the innumerable Prakritisms that are found in the latter. Even further on, these two linguistic currents—one the Vedic of the classes and the other Prakrits of the masses—went on developing on parallel lines; one ending and settling down as classical Sanskrit and the other in the modern Indian languages. The classical Sanskrit is raised to sublimity and grandeur by Vyāsa and Vālmiki, to beauty and elegance by Kālidāsa and Bhavabhūti, to profundity and harmony

by Dandi and Bāna, to spirituality and bliss by Shankara and Rāmānuja, to regularity and legality by Pānini and Patañjali. This Sanskrit language was for centuries being used as a vehicle of religion, of philosophy and also of the mundane worldly transactions of the cultured, higher Aryan people in India. The Vedic Sanskrit and the classical Sanskrit are the two chronological stages of the same language.

8. The Classical Sanskrit

The characteristics of classical Sanskrit are too well-known and are too numerous to be mentioned here. The vowel and consonant series are almost the same as we have in the modern Indian languages. The formation of words takes place with the help of fifty varṇas. There are vowels, short, long and diphongal. The vowels coming in juxtaposition get coalsced. They undergo *guṇa*, *vṛiddhi* and *samprasāraṇa* in addition to other normal phonetic changes. There are five classes of consonants arranged according to the places of their articulation. Some of them are surds, both aspirated and unaspirated and also sonants of two kinds and nasals. There are semi-vowels, sibilants and conjunct consonants. The morphological characteristics of Sanskrit are peculiar. There are eight cases and three numbers. There are general case-terminations applied to nouns ending either in vowels or in consonants. They differ according to the gender of the nouns and the pronouns and are modified under some other circumstances. The verbal system is the richest. The roots are first classified into two *padas* and further into ten conjugations. The verbal terminations fall into two groups, the *Sārvdhātuka* and *Ārdhadhatuka*. The completion and the continuity of the action is indicated sometimes by reduplication or the repetition of the root. All the tenses and the moods comprise the ten *La-kāras* (लकार). The composite Sanskrit verb consists of augment, reduplicated syllable, root, connecting vowel and the termination. Words—both nominal and verbal—are formed with the help of *taddhita* terminations in the case of the former and of the *kridanta* ones in the case of the latter.

9. The Prakrits

The next stage that we have to consider in the linguistic tradition in India is the one that is occupied by what are called the Prakrits, the languages of the Prakritis or the common people. These dialects of the masses were current side by side not only with Sanskrit, the language of the Pundits, not only with the Vedic, the language of the *rishis*, the composers of the Rigvedic hymns and the manthrās of the Avesta, but side by side even with the proto-Aryan language. The origin and the growth of the Prakrits are coeval with those of the Vedic, the Avesta and the Sanskrit. But records about them are available only from about the latter half of the first millennium before the Christian era. They are available in great bulk and excel in quality as well as in quantity. There is quite a plethora of Prakrits and Prakrits, indicating a vast and varied linguistic activity which even surpasses that of the Indo-European people.

The Prakrits were the languages in which the commoners of the proto-Aryan race spoke, in which the prophets, Mahavira and Gautam carried their holy and divine message to the people,—the languages which were used by the emperor Ashoka as media for conveying his renunciation to the people in the corners of his empire and by a host of inspired poets,—the languages which, on account of the sonority and the music were put in the mouth of the ladies in Sanskrit plays and languages which more than all, gave rise directly or indirectly to the modern Aryan languages current in Northern India. At one end the Prakrits had contact with Sanskrit and at the other end, they had contact with the indigenous languages. Sanskrit gave them profusely the *tadbhava* words while the indigenous languages gave them the *Deshi* words.

At the beginning, the whole dialectal mass was perhaps one composite entity and had not assumed any definite individual form and therefore any individual nomenclature. The dialectal variations were named only by directions, as the *prāchyā* (प्राच्या), *pratīchya* (प्रतीच्या) and so on. The territorial nomenclature was a subsequent one and came to be attributed to them later on when each of them developed its distinctive

individual feature. The most ancient of the known Prakrits was either the *ArdhaMāgadhi* or the *Pāli*. The other Prakrits viz. the *Shauraseni*, *Māgadhi*, *Māhārāshtri*, *Paishāchi* came to assume distinctive shape subsequently. The Northern Prakrits comprised the Khotan, the Niya, the other Avestan Prakrits and also perhaps the Paishachi and the *Apabhramsa* Prakrits of India.

10. Their Characteristics

The characteristics of the Prakrits are quite peculiar. The most striking characteristic is the absence of the *tatsama* words. 'Another striking thing about them,' according to Dr. Katre,—'is, as far as the formation of words is concerned, the absence of certain combinations of sounds, so common in Sanskrit and the total absence of some other sounds altogether'. They have changes both of vowels and consonants, the lengthening and shortening, the doubling and dropping, the assimilation, both progressive and regressive, the anaptyxis and analogy. The original long vowel in Sanskrit became short before a conjunct consonant in the Prakrits, the short vowel remaining short. The vowel *r* (ऋ) became either *i* or *u*. The visarga became either *ō* or *u* in its final form and medially got merged into the adjoining consonant. With regard to the consonantal changes the principal features of the Prakrits are that the original initial consonant remains the same, the medial and the final ones suffer a number of changes. The medial hard consonants are softened, the soft ones changed to *ya*. The final consonants are dropped, thus reducing all nouns to vowel-ending ones. The Prakrits had retained three numbers for sometime but later on dropped one. Three genders remain. The number of cases is reduced. Dative merges with Genitive. In later Prakrits the Instrumental merges with Locative. With regard to verbal forms, most of the richness of Sanskrit disappeared in the Prakrits. There is only one present tense-active and passive, one future, one imperative. The past tense has remained in a few cases but the general tendency is to indicate the past by means of the past passive participle. Both in nominal declension and in verbal inflection, there was the process of simplification and

normalization in Prakrits which they later on handed over to the modern vernaculars as their heritage. In addition to these characteristics which are common to all Prakrits, each of them has developed its own innovations which have come down to its offspring.

11. The Apabhramsha and the Abhiras

After the Prakrits we come to the next stage in the linguistic evolution, represented by the Apabhramsha. This word is very convenient inasmuch as it applies not only to the language which is known by that name but also applies to the corrupted or the deteriorated forms of the Prakrits. The word Apabhramsha has thus both a specific and a generic meaning and is both a proper and a common noun. The *Apabhramsha* was the language of the people called the *Abhiras*. It became a literary language by the middle of the first millennium after Christ. It possessed a number of petty variations, as many as twenty-seven, current in different tracts of the region inhabited by the *Abhiras*. These *Abhiras*, in the matter of colonization, appeared much later than the Aryans, probably about the second century before the Christian era. They came into India in one or the other of the big exodes, either with the Scythians, or with the Yuhechis or with some other Hun hordes from the North or from Central Asia. They were a nomadic pastoral race. They for a time indulged in marauding activities but later on gradually settled down to peaceful ways of life in the fertile valleys-some in the Panjab and upper Sind, some in the Uttar Pradesh near Ahirawada, still others further South in Cutch and near the rivers Tapti and the Godavari. Though probably they were foreigners, they got thoroughly assimilated among the Hindus and became followers of Shiva and Krishna cults.

12. Its Characteristics

The consideration of the Apabhramsha language is important from the point of view of some modern Indo-Aryan languages such as Sindhi, Panjabi, Rajasthani, Gujarati and Marathi. The most important characteristic of Apabhramsha is the change of final *o* and *a* to *u* (उ). It is therefore called as *ukarbahulā bhāshā* (उकारबहुला भाषा). It does not

possess the vowels र्, ि, ाि, ाो (ऋ, लृ, ऐ, औ). The ए and ओ are pronounced short. The original र् (ऋ) is changed to so many vowels as a, i, u, ए, ar and ri. The consonantal changes are the same as those in other Prakrits. The inter-vocalic aspirated consonants except chh (छ) and jh (झ) are reduced to h (ह). Another prominent feature is the change of m (म्) to vam (वाम्) which has come down to Gujarati and Marathi. The behaviour of the conjunct consonant is another special feature of the Apabhramsha. The morphology of this language is more simplified than that of the Prakrits. There is no consonant-ending noun. There are two numbers and six cases. This language is very rich in pronominal forms and most of them have come down in the present provincial Aryan languages. The process of simplification and normalization of the verbal forms originated in the Prakrits continued here also in the Apabhramsha, and also with regard to the formation of words.

13. The Modern Aryan Languages

We now come to the last stage in the linguistic tradition of India. The date of their evolution is approximately 1000 A. D. This stage is represented by the modern Aryan languages such as the Hindi, Sindhi, Panjabi, Bengali, Gujarati, Marathi and others. These languages possess some tendencies that are bequeathed to them by the Prakrits and the Apabhramsha and some others which are distinctly their own. It is these individual tendencies that distinguish one from the other and establish their individuality. At first sight it would appear that there has been no new phonetic innovation—no new sound added. But minute observation reveals a number of sound changes, some old sounds disappearing, some changing, some other new ones coming in, owing to the contact of foreign languages. Let us now see how the various sounds behave in Marathi and the other sister languages.

14. Their characteristics : (a) Vowels

The sound 'a (अ)' is pronounced in different ways—the usual normal a (अ), the vivrita (विवृत)—the expanded or extended ा, and the samvrita (संवृत)—the contracted or shortened a. They occur for instance, in the Marathi word

गवत meaning grass. The first अ in ग is normal, the second अ in व is lengthened and the third अ in त is the shortest of all, giving the त a consonantal pronunciation as त्. In rural language the middle अ is further expanded and the word is pronounced as गवाड्त, पिताड्ल, चराड्ण. The Bengali and the Eastern languages expand it still more. The words गण, अनल, कदा, मण्डल, वड are pronounced in those languages as गॉण, औनॉल, कॉदॉ, मॉण्डॉल, वॉड. The final अ is also treated in the same way in Bengali, for instance, the words चल, करील, करीत are pronounced as चॉलॉ, कॉरिलॉ, कॉरितॉ. The Sindhi language has developed an innovation with regard to initial अ being changed to इ as in किहाणी, विण, खिमा (क्षमा), लिलाट, किवाड (कपाट). Another innovation started by Sindhi is with regard to final अ being changed to उ. The words हात, कान, दांत, धीट, वड are pronounced in Sindhi as हथु, कनु, दंदु, डीहु, वडु. The आ sound in the Vocative in calling out a name behaves very strangely in different languages. The word सीतारामा is pronounced in Marathi as सितारामाऽऽस, in Punjabi as सੀਤਾਰਾਮਾ, in Sindi as सीतारामाऽਸਸਮा. The behaviour of अ in different languages is also freakish. It changes to रु, रू, री, अ, इ, उ as in words रिषि, रुषि, (ऋषि), रीण (ऋण), रुख (वृक्ष). In Gujerati also the अ becomes रु. The अ is changed to अ as in घटणे (मराठी), घटवुं (गज.), घटना (हिंदी); changed to इ, as in हृदय giving rise to हिया (म. गु.), हिय हिया, हिओ (सिंधी); भृष्ट giving rise to मिढा (पं.), मीठ (हिं.), मिठा (ब. ओरिया), मीठु (गु.), मिठो (सिं.) ; changed to उ as in पृच्छ giving rise to पुसणे (म.) पुछणा, पुछणु, पुछना (हिं), पुछवुं, (गु.). The word मातृश्वसा becomes मावशी in Marathi, मौसी in Hindi, and मासी in other languages. Sometimes, this अ behaves differently in different languages according to their genius, for instance, तृण becomes तिण, तण, तिन, (हिंदी), तण (म.), तुण, (पंजाबी); कृत becoming किदो (गु.), किया (हिं), कीता (पं.). कितो (सिंधी), केले (म.), के, कै (बंगाली), कला (ओरिया); the word वृद्ध becoming बुड्हो (गु.), बुढो (सिंधी), बुड्डा (हिं.पं.), बुढा (ओ.), बुडा (बं.), वडो (गु.), वडील (म.).

The way in which the original ए, ओ, ऐ, औ behave in modern Aryan languages is noteworthy. In Marathi ए and ओ have two pronunciations, one short and another long. In शेत, मेळ, गोत, बोट it is long but in शेतास, मेळांत, गोतांत,

बोटांनीं it is short as these words are actually pronounced as श्यतास, म्यळंत, ख्वातात, ब्वाटांनीं. This short pronunciation also appears in Gujarati as in केवो, घेलो, मेढो, घोडो, चोखा. The ऐ, औ in Sanskrit become ए and ओ in modern Aryan languages, as in तेल (तैल), सेंधा (पं. हिं.), सेंधे (लोण) (म.) (संधव), सोहाग (हिं. बं. ओ.) (सौभाग्य). Sometimes ऐ is reduced to अ as in बैस becoming बस (म.), बस (बं. ओ.). Similarly the combination of अ and उ results in औ as in चौथा (चउत्थ), चौक, चौकोन. Hindi and Panjabi change अय, अव to ऐ and औ, respectively as in जै (जय), भै (भय), नैन (नयन). Marathi, Bengali and Oriya agree with this but with a slight difference due to different pronunciations of अ in each of them. एक becomes आँक or याक (बं. ओ. and in rural Marathi. यक or योक.

14 (b). Consonants :

The modern Aryan languages have accepted some quite new consonantal sounds. The first two gutterals क् and ख् are both कंठच and औरस्य, the latter being perhaps due to Persian and Arabic influence. There are again palatal and dento-palatal sounds. The Panjabi has a peculiar sound as in मेह्ह (मझ = she-buffalo). There are again two lingual sounds in Marathi—one hard and the other soft. In Hindi they are sometimes pronounced differently when they occur medially, as in बङ्ह, गाही, केंकङ्हा, गुङ्हीया, Sindhi like Hindi has both ङ् and र्. The word चंद्र is pronounced as चंडु, पुत्र as पुटु. The original Sanskrit dentals are turned into linguals in Sindhi, तुष्ट becomes in Sindhi टंठो, द्वया becomes डया. The Punjabi and Hindi sounds come very near to Sindhi ones. The labial sounds remain almost the same in all of them. The sounds of the semivowels, especially य् and व् have undergone a change. The य् becomes ज् in Hindi and Punjabi. In Bengali and Oriya they pronounce it as ज् but write it as য্. The word याजन remains याजन in Mar. Guj, Sin., but becomes यजन in Panj. and Hindi as जाजन and in Beng. and Ori. it becomes जাজন but is written as যাজন. The original व् remains व् in Mar. Guj. Sindi. but becomes ब् in H. Beng. Ori. Panj. (sometimes). The sound र् remains the same in all. The ल् remains the same in all except Beng. and Ori. where it is pronounced as न् but is written as ল্. Of

the sibilants, Panjabi has eliminated श् and ष् and retained only स्. There is no ष् in Sindhi and श् is only found in the writings of merchants where it is pronounced as स्. Bengali has uniformly श् only, as in शौकल (सकल), शौश्ठ (षष्ठ). The Gujerati has a tendency to pronounce स् for श्. Panjabi and Gujerati (Surati) eliminate the sibilant sound and reduce it to ह्. From among the nasal consonants Gujerati, Hindi and Marathi (sometimes) have dropped the झ् and ञ् sounds. Sindhi has retained them, as in सिड्कु (शिड), अडणु, अडगु, कना (कन्या), धाजु (धान्य). The ष् is softened in Panjabi and Hindi and is confounded with न् in rural Marathi and is pronounced somewhat like न or ण in Sindhi. There is another phonetic phenomenon common to all and that is of the mutual interchange of sounds, as is noticed in कवडसा—कडवसा, नकसान—नुसकान, महशूर—महशूर, अगोदर—अदुगर, डोकसे—डोसकें, चिकटणे—चिटकणे. These phonetic similarities and also those noticed in the pronouns and the numerals current in these languages can enable us to fix the boundaries of phonetic peculiarities or isoglosses.

14 (c). Their case-terminations :

Now let us consider the morphological characteristics of the modern Aryan languages. 'The morphology of these languages' as Dr. Chatterji says 'is permutation and combination of old material'. They have carried on further, the process of simplification and normalization. The nominative and accusative singulars and plurals are alike in all. Another independent accusative is made up by adding terminations to the nouns but it has the sense of dative. The analogy of applying the noun terminations of masculine nouns to neuter nouns is followed by the modern Aryan languages. Sindhi, Panjabi, Hindi, Bengali, Oriya have lost the distinction between the two genders. Marathi has retained in nom. accu. plural as in फले, फुले, कार्मे. Mar. has Inst. sing. ए and plu. हि which is further reduced to इ.. It has also नें, नीं which appear to be double instrumental. Guj. also has णे (तेणे, कोणे). Sindhi Abl. terminations are आं, ओ, ऊं, अउ, आऊ ; Panjabi Abl. आं, Loc. plu. हि., Inst. plu. हि, sing-नें; Hindi also has Inst. Sing. नें; Oriya Loc. ए. The Accu. Dat. terminations are Mar.-स, ला, ना, तै. Hindi-त; ई, को; Sindhi-खे-ते; Panj.—नु, ताई; Beng.-কে-তে

Guj.—ને. The Abl. term; Mar.—हून, ऊन, सून; Guj.—થી; Sindhi—ખાં, ખો, તો, તાં; Hindi—से; Beng.—হোইতে; Panj.—તੇ, ਥੀ; ਥੋ. The Gen. term. Mar.—चा, ची चें. Guj.—નો, नी, नु. Sindhi.—जो, जी; Hindhi—का, की; Beng.—ইর, এর; Panj.—ਦਾ, ਵੀ; Oriya—ର. The Loc. term. are Mar.—त, ई, आं; Hindi—में; Panj.—ਤੇ; Sindhi—ਮें; Guj.—માં.

14 (d). Their tenses and moods

Of the three Pk. tenses and moods, Mar. has retained two—the present and the imperative. The future is similar to present; with an infix सि, and with ल or न attached to indicate the future; In Mar. the present tense is made from present participle and the past from past passive participle. The imperative is retained by Mar. Ori. Beng. entirely, while others have only the sec. per. sing. The old past tense is dropped by all and is replaced by a past passive participle. In short the modern Aryan languages have a new participial present and a past and a new future. The case terminations are added not directly to nouns but to its oblique form called the सामान्यरूप. The net result of the grammatical heritage received by the modern Aryan languages from the old linguistic tradition can be summed up in the words of Dr. Bhandarkar "that the pronouns are the same as in Apabhramsha, that the old present is turned to habitual past except in Bengali and Oriya, that the imperative is retained in Mar. Beng. Ori; but not in Guj. Sindhi. Panj. Hindi, that the old future by Guj and Braj., that the participles and causals are retained by all."

14 (e). Their Vocabulary

The vocabulary of all these languages contains tatsama, tadbhava, desi, and some foreign words taken from the Austro-Asiatic, Dravidian, and other Aryan languages. In all the three branches of a language, the phonology, morphology and the vocabulary, there are so many agreements in the modern Aryan languages that we can group them in pairs and fix their boundaries in the form of isophones and isomorphemes. Panjabi and Hindi form one twin, Sindhi and Panjabi another, Bengali and Oriya a third, Marwari, Rajasthani and Gujerati a fourth and Marathi-Hindi, Marathi-Gujerati, or Marathi-Oriya the fifth twin. It is a curious

phenomenon that Marathi in some respects shows sisterly kinship with Gujarati, in others with Hindi, and Oriya and in some others with Kanarese.

We have thus traced the linguistic tradition of the modern Aryan languages in India from the hoary times of the proto-Aryan language through the Vedic, classical Sanskrit and the proto-Prakrits to the modern languages. This tradition is the most ancient linguistic tradition in the world and is supported by the evidence of literary records.

15. The New National Language

Hindi : With the advent of 'Independence' here, regeneration has naturally come in, in every branch of our activity. Along with cultural revival, there is also a linguistic revival. There are so many linguistic problems that await the approach of scholars. The adoption of Hindi as the National language in our Constitution has to be respected and its currency made smooth and easy. This can be done by the correlation and the co-ordination not only of the modern Aryan languages in the North but also of the Dravidian languages of the South. Common features in all the branches—phono'ogy, morphology, syntax and vocabulary have to be found out and compared with those of Hindi and only the common ones ought to be used in preparing new books. A new Hindi will thus evolve by this process and it will be a natural and truly national language, perfectly in consonance with the genius of Hindi. May such language thrive and along with it, may other languages both Aryan and Dravidian thrive and complete both the linguistic and cultural renaissance.

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11

THE STUDY OF ENGLISH—A NEW APPROACH

By J. J. NANAVATY

Before the advent of the British, two parallel systems of Education existed in India. The first was based on the ancient Indian tradition with Sanskrit as its chief vehicle. The second was brought to India by Muslim Rulers in the Middle Ages and was based on Islamic ideas through the medium of Arabic and Persian. After the advent of the British a third system of Education was added to the two. This was based on European thought and culture and English was the instrument of its expression. Some educational thinkers observe that if a well balanced synthesis of the three parallel systems had been brought about in the latter half of the nineteenth century it would not only have prevented the existence of different groups in different compartments of life, but might have even hastened the growth of a national system of education in India. It is difficult to say what precisely would have happened. Theoretically this is certainly a possibility but Historians of what may be described as the Post-British Indian education record the existence of two important language controversies. The first, which sprang up in the thirties of the nineteenth century during the regime of the East India Company is known as the Bengal Controversy. The second, which took place in the latter half of the nineteenth century after the departure of Macaulay from India, is known as the Bombay Controversy.

The Bengal Controversy was a consequence of the existence
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of the three parallel systems of education referred to above. The Anglicists inspired and led by Raja Ram Mohan Roy and Thomas Babington Macaulay strongly advocated English not only as a subject of study but also as a medium of instruction of higher education. The orientalists, on the other hand, were in favour of fashioning an educational system whose vehicle of expression would be Sanskrit. They were zealous advocates of oriental thought and culture, and their devotion to Indian philosophy led them to believe that Western thought and culture, if allowed to spread, might usher a period of godless materialism in India. Such a thing, they thought, would be detrimental to her ancient heritage and culture.

The Bengal Controversy centred round English, its importance as a great language and its suitability as a medium of instruction, on the one hand, and Sanskrit with its grand philology and its great potentiality as a vehicle of lofty philosophical thought on the other. It never occurred to the participants on either side that regional languages had a very important part to play in the development of a national system of education in India.

The Bombay Controversy, in its turn, is a natural corollary of its prototype in Bengal. It centered round English not only as one of the subjects of study but also as medium of instruction of higher education on the one hand, and the mother tongue as the principal subject of study and the most natural medium of instruction, on the other. This controversy is of greater importance in the context of present-day tendencies and the prevalent attitude towards the teaching of English *vis a vis* the regional languages than the Bengal Controversy.

Sir Erskine Perry, a judge of the Bombay High Court, wanted Bombay to modernise its outlook by following the footsteps of Bengal and Madras. He was a staunch supporter of English, not only as one of the subjects of study but also as a medium of instruction. Colonel Jervis and Shri Jaganath Shankarset, on the other hand, advocated the use of the mother tongue. The former who was an anti-Latinist thought it his paramount duty "to free the vernacular dialects from the

swaddling bands" in which they had been hitherto confined. The latter whose advocacy of the vernacular languages is well known went a step further by proclaiming that "they possess advantages superior to English as the medium of communicating useful knowledge to the people of Western India."

Unfortunately towards the latter half of the nineteenth century, the Bombay controversy began to lose its dignity and became acrimonious. This unhappy state of affairs brought the Government of Bombay on the scene. It passed orders which were designed to pacify the participants, and even though the orders were couched in equivocal language, English was given the pride of place and became the medium of instruction of higher education.

Both these controversies the one in Bengal and the other in Bombay influenced later day educational thought. The Bengal Controversy marked on the one hand, the triumph of English over Sanskrit. But even so, it did not, on the other hand, dwarf the study of Sanskrit and Persian into insignificance. Although the newly established Universities of Bombay, Calcutta and Madras assigned to English a very high pedestal both as a subject and as a medium of instruction, they made appropriate provision for the teaching of these two classical languages. The Bombay Controversy reasserted the paramount importance of English on the one hand, but at the same time it aligned itself with some of the most important observations of the despatch of 1854 and was consistent with one of its most important recommendations, on the other.

It will be noted that neither the Bengal Pundits nor their counterparts in Bombay made even a passing reference to methodology during the course of their animated debates. They glorified English on the one hand and Sanskrit, Persian or the mother tongue on the other. They do not seem at all concerned either with the technique of teaching English or Sanskrit or the mother tongue. They appeared to believe that if the teaching of these languages was entrusted to scholars good results would be guaranteed. In the twenties of the present century, however, when there was a large scale expansion in secondary education, the Government of Bombay

made a number of attempts deliberately to improve the qualitative side of secondary education by paying attention to the methods of instruction adopted in schools. It employed graduates and trained teachers—in Government schools to teach English in particular.

At about this time, the theory of "Model Institutions" was very widely discussed in educational circles. The Government of the day maintained a number of model institutions. These were well-equipped and well-staffed. New methods of teaching were tried out in these "model" schools and a number of other educational experiments were performed. The intention of Government was to set an example to private and aided schools so that those in charge of the latter may in due course derive benefit by the new methodology and bring about a qualitative improvement in their institutions. Improvement in the teaching of English was brought about to a certain extent in some of the "model" schools of the day run by Government. Visual aids such as charts, models, pictures etc., were introduced in the teaching of this subject.

Some of the well-known educationists of the day like Wren, Martin, Sharpe and Conventon made bold attempts to make English less grammer-ridden by laying more emphasis on composition. But the reports of the inspecting officers of this period do not shed any light on the methods of teaching English, based on a scientifically controlled vocabulary. Some of them refer to the direct method of teaching English and very eloquently point out its advantages over the translation and indirect method of teaching English. At times they tend to magnify the mis-pronunciations of some of the Indian teachers of English and lay great stress on practice in spoken English.

A cursory glance, however, at some of the English readers of this period as well as of more recent times will convince us that none of these books was written on the basis of a scientifically controlled vocabulary.

Nevertheless the importance of word-selection was beginning to be realised during this period. The first person to do this was Edward L. Thorndike, an American professor of Education.

In 1921, he published a list of 10,000 English words which occurred most frequently. Prof. Thorndike selected these words from about 41 sources (Children's stories, the Bible, different text books etc.). Thorndike's selection was based, on the principle of frequency. The latest edition of Thorndike's Teachers' Words List contained 20,000 words selected from about 200 sources.

This method, however, based as it was on the frequency of words that occurred in a cross section of reading material of a particular kind, proved to be defective. It all depended on the particular type of reading material from which words were selected in the order of frequency. The choice of the sources was thus haphazard and even arbitrary.

Others interested in research in Vocabulary, together with Professor Thorndike himself, realised this, and in 1934 some of the leading experts on vocabulary research—Thorndike, Faucett, Palmer, West and others issued, what is known as the 'Interim Report on Vocabulary Selection.'

For a time, this report was considered to be the last word in vocabulary research. But later, as Linguistics and Semantics advanced, the Report was subjected to a good deal of adverse criticism and its defects were pointed out. Thereafter a new method in vocabulary research was invented in the thirties of the twentieth century. This method which is known as Panoptic Elimination has revolutionised the teaching of languages in general and the teaching of English in particular.

In a book entitled "The Meaning of Meaning" written by C. K. Ogden and I. A. Richards, the method of Panoptic Elimination is brilliantly analysed and explained. This method is far more scientific than the method employed by the authors of the Interim Report on Vocabulary Selection. After about 15 years' labour, Ogden and Richards selected 850 words with the help of this method through a scientific and elaborate process of elimination. This research work was carried out at the Orthological Institute at Cambridge. It attracted the attention of many scholars of a new branch of Linguistics called Semantics which studies the meaning of words from the point of view of relationship established on the

basis of space, time, form magnitude, etc. The English language contains about 500,000 different words, and the average Englishman uses about 25,000 of these words. By selecting 850 words scientifically, Ogden and Richards brought into existence a new system of learning and teaching English. They invented Basic English.

Basic English is not merely a word-list but an entirely new approach to the teaching and learning of the English language. It must be remembered, however, that although with the help of these scientifically selected 850 words it is possible to convey, in speech and writing all the ideas that can be conveyed, Basic English is a means to an end. It is the *best first step* to the learning of standard, normal English.

Basic English is properly taught through three well-planned, and well-defined scientific stages. The first stage, known as the Initial Stage, requires the learner to get acquainted with the 850 words (names of things, operators, directives, etc.) with the help of the Basic Way to English readers. The Second Stage is known as the Practice Stage. During this stage the reader is introduced to a large number of book on various subjects of general interest written within the compass of the minimum 850 words vocabulary. Each of the 850 words is repeated about 1,170 times in these different text books, thus making the Practice Stage perfectly "fool-proof."

The third and the last Stage is the Expansion Stage. It is during this stage that the learner, who has mastered the 850 words and their meanings during the first two stages and has come across them in sentences in a variety of grammatical structures in the readers and books designed to be used during these two stages, switches over from Basic English to normal, standard English with the help of books which are not restricted to the 850 words minimum vocabulary but which explain the meanings of new non-Basic words, phrases and idioms with the help of the simple 850 words previously learnt.

In the early and middle forties of the present century, a large number of high schools in India particularly in the Bombay Province of those days, used the time-honoured readers of that period, such as the Dagon Readers, Hodge's English

Readers, Direct English readers, Koh-i-Noor Readers and New India Readers. In addition to these, other systems, such as Palmer's 1000-word English, West's New Method (1400 words), Faucett's Oxford Course (2500 words) and Tipping's Rapid Readers (5000 words) were also in vogue.

It was during this period, that the orthological institute of Cambridge made strenuous efforts to introduce Basic English as a scientific first-step to normal English in the lower classes of high Schools in India after convincing the Education Departments of the different provinces about its superiority over other methods of teaching English.

In fact a number of Education Departments, realising the scientific and linguistic value of the system, sanctioned a number of books and readers written in Basic English for use in the lower standards along with a large number of books and readers of the conventional type embodying a vocabulary based on the "frequency" method. On account of the orthodox that prevailed at that time in educational circles, these educational authorities could not see their way to making the use of Basic English readers compulsory.

The well-intentioned efforts of the advocates of Basic English were misunderstood by a large number of educators and teachers. A good many of them criticised the system without studying it and without trying to understand it. The idea of a strictly limited vocabulary was wholly unacceptable to many of them because as some of them wrongly observed "it was an attempt made by White hall to perpetuate Babu English and Pigeon English in India."

It is interesting to note, on the other hand, that at about this time the old Bombay Controversy showed signs of revival not only in Bombay but in many parts of India. The mother tongue, in almost all the provinces of undivided India, had made a tremendous literary headway. The vocabularies of regional languages such as Bengali, Marathi, Gujarathi and Kanarcse had undergone considerable expansion. A large number of writers were producing creative literature through their media.

Educationists, therefore, realising the importance and

potentialities of the different regional languages were of the opinion that those High Schools that wanted to teach subjects such as History, Geography and Civics through the mother tongue should be allowed to do so. This point of view was supported by a large number of universities which in those days controlled Matriculation Examinations. English, however, continued to remain an important subject in the high school syllabus and was taught from Standard I (now standard V) onwards. In addition to this, a fairly large number of schools continued to teach all subjects through the medium of English. Even those schools that taught History, Geography and Civics through the mother tongue employed English for the teaching of subjects such as Mathematics and Science for some time longer.

A glorious opportunity was lost during this period. A large number of High Schools should have introduced Basic English in their lower standards. The idea that Basic English should, if at all introduced, be taught by teachers trained in the technique of Basic English need not have been insisted upon to the point of not adopting it at all, if such teachers were not available. The other difficulty namely that a world war was in progress and things looked gloomy had some substance but even that could have been surmounted with the guidance and cooperation of the Orthological Institute.

The introduction of Basic English in the lower standards of the high schools would have given a greater impetus to the teaching of the mother tongue and to the teaching of Hindi/Hindustani if either of them had been systematically introduced then.

English would have been taught scientifically and "without tears". Much time and energy of the pupils would have been saved inasmuch as they would not have been required to acquire an unwieldy, unscientific vocabulary consisting of an indefinite number of superfluous words at the initial stage, and the time and energy thus saved would have been utilised to better advantage by teaching the mother tongue, Hindi and other useful craft subjects with greater vigour.

It must however be noted that the outcome of the widespread revival of the Bombay Controversy during this period was different from what it was when the Controversy appeared to come to an end towards the latter half of the nineteenth century. During those days English came out unscathed and triumphant from its crucible. That was not the case at the time of its large scale revival in the early and middle forties of the present century. If anything it was a triumph for the regional languages, which tended to weaken English to a certain extent though not completely. Moreover, the educational experts who took part in the revival were, unlike the intellectuals of the nineteenth century, well-informed and abreast with some of the most important developments in methodology. It is very strange indeed that the highly scientific technique of teaching Basic English did not appeal to them.

Soon after Independence, a new phase set in. The teaching of English was eliminated in arithmetical progression from Standards V, VI, VII (old standardss , II, and III) and was introduced in Standard VIII (Old Standard IV).

At present, we are passing through this phase with a feeling of uncertainty. Many educationists think that the existing position should be re-examined in the light of the experience gained.

The present day emphasis on the 'structural' method of teaching English as could be seen from the Readers in use does not, it should be remembered, rule out 'situational' teaching in accordance with the spirit of the Direct Method and the existence of a scientifically controlled vocabulary. But the vocabularies, on which the structural method is based, lack scientific precision inasmuch as the method of Panoptic Elimination is not employed in formulating them.

Let us, therefore, not lose a golden opportunity once again. If, as it would seem in the not too distant future, English is to be re-introduced as a subject in Standards V, VI and VII on account of its international currency and its potentialities as a great instrument of scientific thought and culture, it should be taught in accordance with the technique of Basic English with suitable modifications and even additions,

in those three standards. Thereafter our pupils will find it very easy to switch over to normal, standard English which they will have to learn very efficiently at the collegiate level.

As a scientific introduction to the teaching of English in the earlier stage, Basic English will revitalise our system of teaching English from the High School to the collegiate stage.

12

SOME THOUGHTS ON WORLD PEACE

By R. P. PATWARDHAN

The thought of publicists on international affairs is today strikingly different in one respect from what it was fifty years ago. All publicists and statesmen today, without exception, profess to be lovers of peace. The days of Bernhardi and Trietschke are gone. No one today speaks of 'holy war', or of its being not only 'a biological necessity of the first importance', but a moral agent, 'opening the most fruitful field to all virtues,' raising men from their ordinary self-seeking activities to heights of altruistic action, and making for human progress, etc. etc.

Equally rare, on the other hand, is the facile optimism which saw in a World-State the inevitable and easy culmination of the historical process. The process of history, so it was said, is, on the whole, one of greater and greater integration. In early times men lived in tribal groups; tribes came together, to form small kingdoms; a number of small kingdoms formed bigger kingdoms; and some of these, in turn, coming together at times formed still bigger kingdoms. The process of union may have been initiated by conquest, but if the larger union continues, it does so because it has succeeded in enlisting the goodwill of the members of the Union. The units coming together, again, need not be kingdoms : they may be republics, and the union may be by means of a federation. But whatever the form of government, and however the process may have begun, this is its general character;—the formation of bigger

and bigger organizations. This is how Ancient Rome, beginning with a union of three small tribal settlements living near each other some twenty-five miles from the mouth of the river Tiber, became the nucleus of a vast empire. Much the same is the story of Great Britain : Germanic tribes crossed over to the island in the 5th century, and established petty kingdoms there which, after many vicissitudes, came under one government and became England; and then in the beginning of the 18th century, England and Scotland came together to form Great Britain, and to become, in the course of another century and a half, creators of a world-wide Empire. It is the same elsewhere : evolution takes the form of greater and greater integration. The process cannot stop with the State as it is, but must end, so it was argued, with the formation of a world-State with its corollary, World-Peace.

The argument is not at all conclusive. It is like the argument of the *Perfectibilists* of the 18th century, who argued, from the advance of medical science in their own time, and the prolongation of human life it had brought about, that human life was capable of indefinite prolongation through further advance of medical science. But the fact is that medical science can prolong human life only within certain limits set by nature; and similarly the tendency to form larger and larger integrations operates only within certain limits and under certain conditions.

If we give thought to the conditions under which human societies combine to form larger unions, we find that such unions are generally formed for reasons of security against some external danger. The union between England and Scotland came about because England wished to avoid the possibility of a hostile Scotland in her rear while she was engaged in a struggle against France. The thirteen American colonies, similarly, which became independent of England in 1783 formed a federation in 1787, partly at least for security 'against the hostilities and improper interference of foreign nations.' If the aggregative tendency, born of fear of external danger, were to operate further, it would be legitimate to argue that existing states would unite to form still bigger states, so

that ultimately there might be two huge Leviathans confronting each other—(a condition towards which we seem to be approximating)—but not that there would be *one world-state*. This latter would come about only if the States of this world were to be threatened by some outside Power—say the Martians. The states of the Earth would then come into one federation; War would remain; but it would be War between the Planets.

But is not the danger created by Man's own scientific discoveries,—the danger of the total annihilation of mankind through the use of nuclear weapons—comparable to an invasion of this Planet by the Martians, and so likely to still the jealousies and fears of the two power-blocs for each other, and lead to the establishment of a Federation of the World? Undoubtedly it is, and that is what raises hopes today of the establishment of stable World-Peace. If the projected summit talks are successful, and lead to the establishment of an international agency to inspect and control the production of nuclear weapons, one would like to cherish the hope that it may be the beginning of a process which might, in course of time, issue in the formation of a World-Government with sole control of such weapons, and later, of conventional weapons as well, the governments of the several states retaining only a police force for the ordinary maintenance of law and order. It depends on whether the summit talks bring about a real change of heart among the leaders, and they shed their distrust of each other; but also, it must be remembered, on the outcome of the attempts which it seems are being made to invent protective devices against nuclear weapons. Because if these attempts are successful, nuclear weapons would lose their terrors, and the urge for the establishment of the world-state would be lost.

It is not enough that the leaders of the rival blocs should be convinced of one another's bona fides; it is necessary that the *people* of the respective countries also should share their leaders' feeling, and should, moreover, feel confidence in the fairness and justice of the World-Government that will be set up. The rationale of the nation-state must be extended to the world-state. A nation-state, even the most unitary,

may be looked upon as a federation of many units—economic, political, religious, cultural, and so on. All these units cohere and operate as one, partly, as has been pointed out, for reasons of security from external danger, but partly also because they have confidence—even those among them who may be nursing some grievance at the moment—that sooner or later justice will be done to them, and that they too will have equal opportunity with the rest. If World-Government is to endure, the peoples of the world will have to feel the same confidence. This is really the crux of the matter : how to organise the World so that the organs would command the confidence of the peoples of the world. It is because the existing world organization—the United Nations Organization—does not fulfil this requirement that each country at present insists on the maintenance of its *sovereignty*. And so long as each nation insists on the maintenance of its sovereignty, no effective World-Organization can come into existence. There is no easy solution for this difficulty.

In economic matters, above all, would the peoples of the world look to the world-organization with hopes of betterment. Such betterment would, in part, follow automatically from the creation of a world-state, because the vast resources which are at present devoted in every country to the accumulation of weapons of war would then be released to promote the welfare of their citizens. But over and above this, the present separatist tariff or immigration policies cannot be pursued with the same rigour in the world-state. These policies would have to be determined from a global point of view. This would involve a sacrifice for the well-to-do states, who would have to share their prosperity with the not-so-well-to-do peoples. Happily, there is a general recognition now that universal peace is unattainable without social justice. It was this recognition that led to the creation of the International Labour Organization (ILO) after the first World War, and that has prompted the setting up of numerous welfare organisations like the World Health Organization (WHO), Food and Agriculture Organization (FAO) etc., after the Second. It is also at the basis of the Foreign Aid Programmes of the

present day.

There would be one dangerous possibility under a World Organization—that arising from the problem of population. Would not those races, which have been backward hitherto, and have not made any significant contributions to civilisation, multiply faster than the more advanced races, and crowd them out, under the sheltered conditions provided by the World Organization ? Not to admit the possibility of this danger would be folly. But the danger could probably be minimised by means of education : we must ever be “educating our masters.” And, after all, this possible danger has to be set now against the imminent danger of annihilation. Each day that passes renders it probable that more and more nations would obtain command of nuclear weapons, and the fate of the world become ever more and more precarious. That is why the projected summit talks are of such tremendous importance. The fate of the world hangs on them.

13

TRAINING IN SPIRITUAL LIFE

By R. V. DE SMET, S. J.

The institution to which I belong is called "Pontifical Athenaeum". It is "pontifical" because, like many similar institutes for higher Ecclesiastical Studies, it was initiated by a direct decision of the Pope, the sovereign Pontiff of the Catholic Church, and continues to depend upon his supreme authority. As to the name "Athenaeum", it points back to a pre-Christian institution, the temple of Athene, the Greek goddess of wisdom and special patroness of Athens. It may appear strange that it should now designate not only libraries and scientific clubs, as in England, or colleges for boys and girls, as on the Continent, but even strictly ecclesiastical institutes for the training of priests. Yet, this is precisely a mark of the catholicity of the Church which considers it its duty to take up under its re-vitalizing influence whatever is sound and valid in the various cultures which it comes to purify and elevate. The name "Athenaeum" indicates very aptly the continuity which links our present Christian pursuit of Wisdom with the pre-Christian *philosophia* of the Greeks or the *tattva-jijnasa* of the Indians.

Our staff and students are divided among various houses, called respectively Papal Seminary, Nobili College, Fransalianum, Britto Bhavan, Carmel House and Bethany Ashram. But, from the standpoint of their intellectual training, they all belong to one and the same institution, the Athenaeum. This Athenaeum comprises two Departments or Faculties, the Department of Philosophy (with a preparatory section of Humanities) and the Department of Theology or Divinity.

It might be interesting to expose in detail the programme of our studies but my intention is rather to point to a particular feature of our method which, like our name, goes back to the hoary past, yet may very well arouse envy in the heart of many a modern educationist. I mean the **completeness** of our training. By this I am not pointing to the fact that sports and manual work permit our students to relax from their attention in the lecture-halls, but rather to the fact that what they have received but notionally in these lecture-halls, they are afforded full opportunity of assimilating deeply through meditation, prayer, asceticism and personal progress in spiritual life. Their **brahmacharya** or religious celibacy puts them in the right condition to practise this Christian discipline or **yoga** which alone can transform them into full devotees of Truth.

Sakayanya narrates in **Maitri Upanisad**, 4.1-4, how the Valakhilyas, those resplendent beings, free from evil and living in chastity, said to Kratu Prajapati : "Sir, what is the prescribed way for this elemental soul, whereby, on quitting the body, it may come to complete union (**sayujya**) with the Spirit ?" And to them Prajapati answered : "By knowledge (**vidya**), by austerity (**tapas**), and by meditation (**cinta**) Brahma is apprehended."

This teaching indeed goes back to **Bṛhadaranyaka Upanisad**, 2.4.5 : "Verily, my dear, it is the Atma that should be seen; it should be heard of, reflected upon, pondered on in deep concentration, O Maitreyi. Lo, verily, it is by the vision of the Atma, through hearing, reflection and understanding, that all this is known." To Sankara's mind this is a decisive text, a sort of blue-print to which he refers again and again in developing his **Brahma-jijnasa**. Taking it as a statement of method he explains : "The Atma should *first* be heard of from a teacher and from the infallible tradition, it should *afterwards* be reflected upon through logical reasoning, it should *then* be pondered on, steadfastly concentrated upon. Thus indeed it becomes seen : when these initiatory steps (**sadhana**), viz. hearing, reflecting, concentrating, (**sravana-manana-nididhyasana**) have been gone through. When these three are combined, then the true vision of the uniqueness of Brahma is brought

about successfully, not otherwise, viz. by hearing alone."

The Christian tradition prescribes the same threefold *sadhana* : "The word of God," writes Saint Ambrose, "begins to grow in our soul when it is received, increases while it is rationally understood, and comes to maturity when it is fully grasped and assimilated." These three steps, viz. *susceptio*, *intellectio* and *comprehensio*, constitute one process entirely necessary to him who pursues wisdom. John Moschus, the Abbot, warns his disciples lest they take "lovers of words for true lovers of wisdom" and "esteem clever talk above meditation, silence and tranquillity." Saint Augustine exhorts his Christian listeners to contemplate with the eyes of the mind the mysteries expressed in the words of the creed and "to let their faith be transformed into intellectual realization": "*Crede ut intelligas*". Pseudo-Dionysius unfolds his "*Mystical Theology*". The monastic and cathedral schools and, from 1200, the first mediaeval Universities never lose sight of the Augustinian triad : *fides*, *intellectus*, *visio* (faith, intelligence, vision) or, in the words of Saint Bonaventure : *credere, intelligere credita, videre intellecta* (to believe, to understand what you believe, to see what you understand). Whenever mere Dialectics threatens to get the upper hand and to stifle silent contemplation, the rights of mysticism are quickly vindicated by such men as Saint Bernard, Hugh of Saint Victor, Kilwardby, and a host of other outstanding teachers.

In spite of the modern laicization of culture and education, and of the place taken by the positive sciences seldom without detriment to the pursuit of natural and supernatural wisdom the Church has been able to preserve intact the supremacy of philosophy and theology in the training of clerics and to retain as one of its most precious heirlooms the threefold discipline of faithful hearing, sincere intellectual scrutiny and prayerful realization. This is still the discipline followed in institutions such as our Athenaeum and this is why I could truly say at the beginning that our students enjoy a more complete training than in most colleges.

How does this work in actual practice ? If we allow 8 hours for sleep, the remaining 16 hours of a student's day

are, roughly speaking, divided as follows : class-time, 4 hours; private study-time, 4 hours; prayer and meditation-time, 3 hours; meals, sports, manual work and relaxation-time : 4 hours. Outside the time allotted for relaxation, silence should be kept unless some necessity requires one to speak.

Is it possible for young men to sustain cheerfully the austerity of such a life and to persevere in it ? Whatever be the religious tradition to which one belongs, it is nowhere possible unless one is carried by love. And love to carry us through all the trials of such a life must be neither a passing attraction, nor a fleeting moment of delight, nor a superficial interest, nor a temporary dedication, but a strong, coolly passionate, entire surrender of oneself to that which appears most perfect and most lovable.

This is the love which Yajnavalkya aroused in his dear Maitreyi and kindled into a devouring fire: "It is not for the sake of the husband, my dear, that he is loved, but for the love of the Atma (the blissful Spirit). It is not for love of the wife that she is dear, but for the love of the Atma. Neither is it for love of the sons, or of wealth, or of Brahmanhood, or of Ksatrahood, or of the worlds, or of the gods, or of the beings, my dear, that sons, wealth, Brahmanhood, Ksatrahood, worlds, gods and beings are lovable, but for the love of the Atma. It is not for love of all, my dear, that all is loved , but for love of the Atma all is dear (*Na va are sarvasya kamaya sarvam priyam bhavati, Atmanas-tu kamaya sarvam priyam bhavati. Brhadaranyaka Upanisad,2.4.5.*)."

This is even more clearly the love which the Lord Jesus proposes to all his followers and in which he sums up the whole of law and religion : "Thou shalt love the Lord thy God with thy whole heart, and with thy whole soul, and with thy whole strength, and with thy whole mind; and thy neighbour as thyself." (*The Gospel according to S. Luke, 10.27*).

Accordingly, in his treatise "*On the Perfection of Spiritual Life*", Saint Thomas Aquinas says that "spiritual life consists essentially in divine friendship (*caritas*)" i.e. that *agape* which the first Greek-speaking Christians opposed to worldly *eros*.

This spiritual love gathers all the powers of man to focus them upon the one Lovable. Indeed, writes Aquinas, "in the Lord's injunction, the term 'heart' refers to the will-power through which we intend the end, the term 'soul' to the affective powers through which we attach ourselves to this intended end, the term 'mind' to the cognitive power through which we submit to its truth, and the term 'strength' to the executive powers through which we unite ourselves to this blissful end."

"In this life," he continues, "man can attain to the perfection of this love if he first refers everything to God as to his last goal by transforming his life into a continuous service of God and thus ordering everything he does, except sins, to the glory of God; it is thus that he succeeds in loving Him 'with his whole heart'. Secondly, he should submit his intellect to God by assenting in faith to whatever God himself has revealed; thus he will love Him 'with his whole mind'. Thirdly, he should integrate all his affections into one all-inclusive love of God and love in Him whatever he loves; thus he will love Him 'with his whole heart'. Fourthly, let him infuse all his external behaviour, speech and activity with the strengthening energy of spiritual love and in this way let him love God 'with his whole strength.'

The spiritual way of love should be considered at two different levels : *natural* and *supernatural*, because it is but man's answer to God's love and God had first to make man exist as a person before He could freely give Himself to him. Man's love always presupposes the existence of its object, but God's love for us is so great that it even created its object. Not only to give oneself to the beloved but first to give him his own proper self, this is divine love, since He alone can create, who is pure Being. In its first movement God's love creates us as other than Himself, though totally dependent on, and related to Him; in its second movement it lifts us from our otherness and makes us share in the blissful secret of His intimate nature. Both these movements are free : there is no necessity for God to create us or anything else, and even after we are created no inner necessity can force Him to elevate us. The gift of existence does not imply the gift of intimate

self-communication and this is why we say that the order of elevation is really *super-natural*, i.e. above all claims, powers or means of our created nature. It consists entirely in the purely gratuitous self-revelation and self-surrender of God to his intellectual creatures. It cannot be initiated by us but by Him alone.

As to our love for God it also moves on two different planes : natural and supernatural. Through natural love we aim at God as at our creative Cause, providential Preserver and rewarding End (the three aspects of God as the one total Cause of the universe which are so strikingly figured in the *trimurti*.) Through supernatural love we reach Him no longer in His causal relationship to us but in His very essence, the mystery of which His own free self-surrender throws open, first to our faith, then to our vision.

Long before they enter our Athenaeum most of our students have started treading the path both of natural and supernatural love and fed their souls upon supernatural as well as natural truth. But to study philosophy for three years and theology for four is now for them the main part of their religious dedication, through which they become absorbed in the fulness of truth and transform their love into a deep and all-pervading experience, provided they practise intensely the threefold discipline of receiving the truth, ascertaining it through personal reflection, and letting themselves become possessed by it through prayerful concentration.

Insofar as this discipline is a personal exertion, an active endeavour, it belongs to *asceticism* (from Greek : '*askesis*', exercise). Insofar as it turns into a passive receiving, a direct realization, an invasion of the soul by God, it becomes *mysticism*.

Mysticism is the human experience of an immediate contact with the Absolute. It can be natural or supernatural. Natural mysticism attains the Absolute as Cause, supernatural mysticism attains the Absolute as It is in Itself.

When, impelled by his inborn desire for the plenitude of reality, man rejects the fascination of the sensible world and submits himself to some form of *yoga* or spiritual discipline,

he may one day reach the heights from which his very being springs. "At that point of emergence, where the source and the stream are undistinguished, the spirit of man experiences the exultation of grasping the Absolute in the very act of grasping itself." (R. Antoine, *Christian Mysticism*, in *Bulletin of the Ramakrishna Mission Institute of Culture*, Calcutta, VI. 6, p. 130) This is *natural* mysticism: to reach God as Cause in the very act of reaching oneself as effect. As Sankara explains, we may very well know nationally that we are totally effect and yet remain in *avidya*, but suddenly to realize ourselves as effects, this is *vidya* and it implies an experience of our Cause as Cause. But it is more immediately a rest in oneself and but mediately a rest in God. This is why it is so current to interpret this experience in impersonal terms. Indeed, no person can be discovered as person and in the uniqueness of his personality outside the loving exchange of mutual manifestation and surrender; it is a discovery which depends upon the free decision of that person. But natural mysticism is an experience which lies within the power of man and does not depend upon the grace of God; it is a seizing, a conquering rather than a receiving; hence through natural mysticism God is not revealed in the secret of His personality but somehow impersonally as a neuter Absolute.

Yet the contact of the mystic with this Absolute is sufficiently immediate to make him suspect that this most perfect reality, "than which nothing higher can be conceived" (S. Anselm), this supremely great Being (*Brahman*, the 'Great One', if the derivation from root '*brh*' is right), subsists in Itself as the most mysterious centre of consciousness, freedom and love, unassailable from outside but capable of freely manifesting Itself not in thunder and lightning as an impersonal material energy, but in the respectful whispering of love and the humble pleading of tenderness. And he may feel with delight that his autonomy is about to change into loving surrender and that he may be requested to let himself be grasped by the personal God and no longer to grasp Him from outside, impersonally. Then he will listen with rapture to the voice of Christ, though it shatters his natural pride,

because at the same time it satisfies his most ancient desire for being loved by Him Who is Love and permitted to love Him directly.

This is how the Blessed Jan van Ruysbroeck (1293-1381) relates his experience of the choice between natural autonomy and surrender to the supernatural self-gift of God in Christ:

"Now observe that whenever man is empty and undistracted in his senses by images, and free and unoccupied in his highest powers, he attains rest *by purely natural means*. And all men can find and possess this rest in themselves by their mere nature, without the grace of God, if they are able to empty themselves of sensual images and of all action.

"But the loving man is not able to find his rest here, for charity and the inward touching of the grace of God will not be still. And therefore the inward man cannot long remain in himself in natural rest..... This rest is not permissible for it causes in man the blindness of ignorance and the dejection of indolence. It is nothing else but an emptiness into which man sinks, forgetful of himself and God and of all things which have need of action.

"This rest is contrary to the *supernatural rest* which men possess in God, for that rest is a loving flowing-away with a single perception of incomprehensible charity. This rest in God, which is always operatively sought with fervent desires, and is found in delectable inclination,— and the flowing-away of love is everlastingly possessed, and as it is possessed is none the less sought,— this rest is exalted above the rest of nature as high as God is exalted above all creatures."

(*The Spiritual Espousals*, translated by Eric Colledge, London, 1952, pp. 166-167)

The great convert, Saint Augustine, had first been fascinated by the self-sufficient mysticism which he discovered in Plotinus's *Enneads*, before he yielded to the higher invitation of Christ. Commenting upon the words of *Psalm XLI*, 'Where is thy God?,, he writes:

"Meditating night and day on this taunt, I have myself sought to find my God, that if I could I might not believe only, but might 'see' also somewhat. For I see the things which

my God has made, but my God Himself, Who made these things, I do not see..... What shall I do that I may find my God? I will consider the earth. The earth was 'made.' Great is the beauty of the earth, but it has a Creator. Great the marvels in the seeds and in all things that reproduce themselves, but they have all of them a Maker. I point to the greatness of the circling sea; I am struck with astonishment and with wonder, but I look for its Maker. I raise my eyes to heaven and to the beauty of the stars, I behold with wonder the brightness of the sun, sufficing for the bringing forth of the day, the moon cheering the darkness of the night: wondrous indeed are these things, worthy of our praise, nay rather of our awe, for these things are no longer terrestrial, but they are heavenly. Yet is not my thirst stayed even there; I admire these, and I praise these; but I thirst for Him Who made them.

"I turn my thoughts to myself, and I enquire who I am myself, who am carrying on this enquiry! I find myself to have body and soul..... I discern the soul to be something better than the body..... There is something that the soul can see by itself....., something that I behold with the inward eye. It is neither colour, nor sound, nor smell, nor flavour; heat nor cold; hardness nor softness..... It is within, and at the same time it is beautiful; it is praised, and at the same time it is seen: and even if these eyes are in darkness, the soul rejoices in its light.... for by itself it discerns itself. In order to know itself, the soul beholds itself, and yet does not require the help of the bodily eyes in order to behold itself: indeed it rather abstracts itself from all the bodily senses, as interrupting and confounding it with their din, in order to see itself in itself; to know itself as mirrored in itself.

"But is God then anything of the same nature as the soul? God cannot, it is true, be seen except by the soul; but yet He cannot be seen as the soul can. For this God which the soul seeks to find is a Truth not subject to change, a Substance not capable of failing. The soul itself is not of this nature : it is capable of progress, and of decline; of knowledge, and of ignorance; of remembering, and of forgetting; at one

moment it wishes for this thing, at another it does not wish for it. That mutability is not incident to God. Were I to say God is susceptible of change, they will insult over me, who say, 'Where is thy God?'

"Having therefore sought to find my God in visible and corporeal things, and found Him not; having sought to find His substance in myself, (as if He were of the same nature as myself,) and found Him not, I perceive my God to be something higher than my soul.

"Therefore that I might attain unto Him, I thought on these things, and 'poured out my soul above myself.' When would my soul attain to that object of its search, which is 'above my soul,' if my soul were not to 'pour itself out above itself'? For were it to rest in itself, it would not see anything else beyond itself; and in seeing itself, would not, for all that, see God..... The house of my God is above my soul; from thence...He beholds me; from thence He created me; from thence He directs me and provides for me; from thence He rouses me, and calls me, and directs me; leads me in the way, and to the end of my way.

"For He Who has His house very high in a secret place, has even on earth a tabernacle: His tabernacle on earth is the Church, which is yet on her pilgrimage. It is here that He is to be sought: for it is in this tabernacle that we find the Way, by which we arrive at His House.....

"In the house of God is the fountain of understanding..... And it is going up to the 'tabernacle' that we arrive at the 'house' of God.....: by following the leadings of a certain delight, a certain inward spiritual joy, when there comes from the house of God a sweet sound, as from some instrument, and we....., led on by its sweetness.....and recalling our attention from all noise of flesh and blood, make our way on even to the house of God..... In the house of God there is a never-ending festival....., an eternal 'holiday': the presence of God's face, joy that never fails." (*Enarratio in Psalmum XLI (XLII)*, translation (slightly adapted) of *Library of the Fathers*, Oxford, 1848, pp. 184-189)

Let this important quotation stand as exemplifying the

mode of spiritual life which I have tried to represent in the preceding pages. Saint Augustine speaks here as a religious *guru* to the big crowd of Christian devotees and aspirants (i. e., catechumens who will receive baptism on the Saturday before Easter) who are gathered in his cathedral church for the liturgy of Lent. His preaching is an '*enarratio*', i. e., an exposition or *bhasya*, of a Davidic Psalm, a text considered as sacred because it is, like the rest of the Bible, directly inspired by God. In this exposition he has recourse to *other texts* of the same Bible, which harmonize with it, to *his own experience* (the passage is strikingly parallel to his famous mystical vision at Ostia, cf. *Confessions*, XI, 23-26), to *philosophical reflection* first about the world of visible and corporeal things, then about himself, and finally about the unchanging personal Substance Which stands even above the soul, to the light of *his Christian faith* lived in the midst of the faithful who constitute the Church, 'God's tabernacle on earth,' and to *man's imperishable desire* for immutable Truth and Beauty. This teaching, so permeated with lyrical piety, intelligence and burning love, is meant to leave its listeners in a state of prayerful contemplation and is itself prayer. For prayer, according to Saint Augustine is, above all, desire, actual yearning, conscious longing for 'the presence of God's face.' Obeying a 'certain delight', following the suggestion of that 'sweet sound which comes from the house of God', "what should you do then in this pilgrimage? What should you do?— 'There is with me prayer unto the God of my life.' This I make my business here; I who am the 'hart thirsting and longing for the water-brooks,' calling to mind the sweetness of that strain, by which I was led on through the tabernacle even to the house of God." (*Ibid.*, p. 196)

Prayer then is the crown of this threefold *sadhana* which in the wake of the greatest teachers of mankind we are trying to practise in our Athenaeum. Our *Jnana* turns into *yajna*. When the fuel of love is true knowledge, it kindles such a fire that no one can escape its warm and kindly brightness. May our students leave us with such fire in their breast !

THE PHILOSOPHICAL PREDICAMENT IN THE MID-TWENTIETH CENTURY

J. D. SWAMIDASAN

1. Writing in the first quarter of the century, Bosanquet published a work entitled *The Meeting of Extremes in Contemporary Philosophy*. The philosophical trends in the middle of the century could not be characterized in so facile a manner; indeed, it would be highly misleading to do so. It would be much nearer the truth to say that in contemporary philosophy there is well-nigh a complete polarization of philosophical opinions, so much so that adherents to different philosophical schools of the present time hardly find it possible, or at least profitable, to converse or argue with one another. There is not felt even the hope of one side carrying conviction to the other. The problems to the solution of which one or the other type of philosophy addresses itself, the methods it employs, even the language in which its discussions are conducted, seem utterly alien, irrelevant and meaningless to the other. The gulf between the two seems absolute and impassable. Consider, for instance, the possibility of a fruitful philosophical debate between Russell or Ayer or Stebbing or Ryle on the one side and, say, Heidegger or Jaspers or Gabriel Marcel or Jean-Paul Sartre on the other; or again, between an advocate of *perennial philosophy* like Aldous Huxley and a *philosophical analyst* like Moore.

I do not wish to suggest that there are in contemporary thought two and only two types of philosophical approach. There are, indeed, several types of philosophical thinking; and

there are schools within schools, and differences of opinion among philosophers who employ the same basic techniques of philosophical enquiry which make the word 'school' obviously inappropriate. My intention in choosing and comparing certain types of philosophy is to illustrate and reveal more starkly the polarization within philosophy at the present time. I shall try to substantiate my thesis by a reference to, and comparison of, contemporary discussions in the broadly understood spheres of metaphysics and ethics.

2. Aristotle, in the *Metaphysics*, gives three alternative definitions of the scope of First Philosophy, First Science—or metaphysics, as it came to be known later. First, it is the science of first principles, the enquiry into the nature of the presuppositions or postulates of the various, subsidiary, special sciences. Second, it is the science of being *qua* being, of that which *is*, of reality as a whole, of existence in its most general nature. Third, it is *theology*, since God is the highest *form*, pure *actuality*. The third definition can be subsumed under the second – since in Aristotle's philosophy God is *the* instance of pure being – so that we may say that, in Aristotle's opinion, metaphysics is the science of first principles or of being as such.

It is interesting to note that Collingwood denies the possibility of any such science as a science of pure being, of reality as a whole, and concludes that whatever philosophers may have purported to do, whenever they did do anything useful in metaphysics they always *in fact* performed the task of discovering and revealing the first principles or presuppositions or postulates of the special sciences. Collingwood went on to say further that it is absurd to ask whether a 'presupposition' is true or false: the only question is 'Is a presupposition made or is it not made?' Thus metaphysics is a historical science whose business is by an analysis of scientific truths and methods — the kind of questions scientists ask, the kind of investigations they undertake, and the kind of answers they give – to lay bare the underlying presuppositions of the sciences at different historical periods. The analysis may be thorough or superficial, accurate or inaccurate, clear or obscure. But no amount of, and no system of, metaphysical analysis can

tell or ought to attempt to tell us anything about the nature of Reality.

3. The most conspicuous development in philosophy during the first half of the century is the rise of the school of philosophical analysis. The originator and inspirer of the movement was G. E. Moore. But Moore has remained somewhat of a lone figure in contemporary philosophy. The more systematic developments resulting from the method of analysis were due to Russell, Wittgenstein, Ramsey, Wisdom, Carnap and the Vienna Circle, and Ayer. I shall briefly sum up the main conclusions of Russell and Ayer as representative of logical atomism and logical positivism, respectively. (To the uninitiated it is necessary to say that Russell, in one of his many philosophical phases, was a logical atomist, and the views and shortcomings of logical atomism are most clearly seen in his exposition of it.)

Russell arrived at philosophy *via* mathematics. In *Principia Mathematica* he, along with Whitehead, proved that the fundamental principles of arithmetic could be derived from basic logical concepts. Nothing more was necessary, and mathematics could in principle be reduced to logic. What Russell tried to do in logical atomism was to extend the ideas of mathematical logic to the rest of knowledge. Analysis of propositions could be carried to such a point that nothing would be left but logical constants and variables. The latter were to be substituted by particulars supplied by experience. Russell believed that in this way we could reach the ultimate constituents of the universe, namely atomic facts. By means of logical analysis, therefore, we get an insight into the structure of the universe. The syntax of ordinary language is a crude form of the syntax of logic. Logical syntax reveals the structure of the universe. The primitive forms of logic are the primitive forms of the structure of the real. Only the variables need to be substituted by particulars, that is, atomic facts. Russell's logical atomism may fairly be described as a logical version of Hume's psychological atomism.

The positive achievement of Russell consisted in laying the foundations of a new branch of philosophy, namely mathematical or symbolic logic. Negatively, his philosophy reduced

the universe to an infinity of particulars, thereby excluding the possibility of any speculative metaphysics in regard to the nature of the whole. But the transition from the syntax of logic to the structure of the universe is really unwarranted. The passage of thought from the structure of language or logic to the nature of the real cannot be made. And this was quickly seen, not least of all, by Russell himself who later recanted the metaphysics of logical atomism.

4. I shall pass over the philosophy of the Vienna Circle –Carnap and others – and proceed directly to the views of Ayer, the high-priest of logical positivism in England. Of necessity, my treatment of this very stimulating and influential thinker must be brief. According to Ayer and several other philosophers of our time the only function of philosophy is analysis. As Wisdom put it, metaphysics is a method of acquiring new knowledge of facts, not a knowledge of new facts. If ordinary language had been adequate, there would have been no need for philosophical analysis. But since it is not, analysis is necessary. Philosophy is nothing but linguistic analysis in order to make clear the logical structure of a sentence. When we have done this, we can recognize the meaning of a statement or, indeed, whether it has any meaning at all. All cognitive statements, that is, propositions conveying knowledge, are either analytical propositions – logical tautologies or definitions – or empirical propositions. Next follows the notorious Verification Principle : the meaning of a statement is the method of its verification. Apart from purely formal propositions, to understand a proposition is to know how to verify it, what are the conditions under which it could be shown to be true or false. Logical positivism takes it for granted that these conditions are ultimately conditions provided by experience, understood as *sense-data*. If there is no way of verifying a proposition by comparing it with sense-data, it is a meaningless statement. It has the apparent form, the linguistic garb of a proposition; it is not, however, a genuine proposition. It has no possibility of being true or false. It is meaningless noise; it is a *metaphysical* statement. Since metaphysical propositions are incapable of sense-verification, they are all

nonsensical. This original, somewhat violent and sweeping characterization of all 'unverifiable' propositions as nonsensical was later softened down to the view that some of them might be significant or meaningful, but they could not be true or false. The reader will have noticed that what has been said of metaphysical statements could easily be extended to ethical statements and, further, to all judgments of value. And so indeed it was. The later analysis of ethical propositions at the hands of the analysts was that they were statements relating to the psychological feelings or attitudes of the individual, or of the kind of exclamations, exhortations, commands, prescriptions, etc. But of ethics more a little later.

I shall at the moment confine myself to two comments only :—(1) The Verification Principle is not itself verifiable; therefore, it is a metaphysical statement or else a tautology. If it is claimed that it is a definition, it cannot surely be an arbitrary one. (2) The restriction of the conditions of verifiability to experience in the sense of *sense-data* is an arbitrary restriction; and such a definition is at best a 'persuasive' definition. One, of course, has the liberty not to feel persuaded.

5. Ayer, I think, says of contemporary philosophy that it is a philosophers' philosophy. It is the philosophy for experts, not laymen. Its inspiration and its goal are scientific, not religious; it is micro-scopic, not macro-scopic; analytic, not speculative; empiricist, not transcendental. One may say more broadly that it is academic philosophy, not the philosophy of life. It is not surprising, therefore, that British philosophers seldom refer to existentialist philosophers. If they do at all, it is only obliquely, casually, with condescension if not irony. Yet no survey of contemporary philosophy can pass over existentialism nor overlook the tremendous impact it has had on contemporary life and literature.

It would be historically correct to describe both the opposing philosophical movements, of philosophical analysis and its offspring, logical atomism and logical positivism on the one hand, and existentialism on the other, as reactions to the Hegelian and neo-Hegelian idealism which dominated philo-

sophy at the end of the nineteenth century. And each, in its own way, is anti-metaphysical. But before I go on to existentialist philosophy, I should like to say a few words about the philosophy of Bergson, whose anti-intellectualism would, in a way, provide a seemingly natural and easy transition from logical positivism to existentialism.

Bergson's philosophy is anti-materialistic and anti-intellectualistic. He considers the mechanistic view of reality to be the direct result of intellectual analysis. The intellect is a secondary and an inferior faculty, a practical instrument, useful only for scientific analysis not for philosophical understanding. The proper instrument for gaining philosophical insight, for a true, undistorted and inward view of reality, is intuition. Intellect is a deviation, a regression in evolution. Reality is a ceaseless flow, a flux, an *elan vital*; and it is only through intuition that we can enter into its understanding, feel and experience its *durée réel*. Scientific knowledge, based as it is on intellectual analysis and using the instrument of logic, falsifies reality. Logical concepts can never give us an understanding of the flowing stream of life. Far from the syntax of logic providing us with insight into the structure of the real, logical analysis inevitably distorts the truth.

6. To return to Aristotle for a moment: his main philosophical problem was to determine the nature of *substance*, that whose reality is ultimate or self-dependent. He answered the question by saying that only individuals are substances. Yet Aristotle's science and philosophy leave out the individual completely. It begins with the species, only the *form* being knowable or intelligible. The mere individual is unknowable and unworthy of the philosopher's attention, *matter* being the purely indeterminate. Hence Aristotle led the way in the development of science and philosophy as objective or universal systems, leaving out of consideration the subjective, the particular, the individual. Similarly, in modern times Hegel's philosophy is a conceptualist philosophy, a theoretical system. The Absolute Idea is all, it is Pure Consciousness: the particular individuals are transient appearances in an illusory Time.

Existentialism is a reaction against the tendency to conceptualize life. It exalts the particular and the singular over the general and the universal; the inward and the subjective over the outward and the objective; it exalts life over knowledge; action and choice over thought and contemplation; existence over essence. Philosophers have long imagined that their rôle was to be the objective spectators of all time and all existence, that they could act as impartial observers of reality. Existential philosophers consider such a hope fantastic, an illusion with which philosophers and thinkers delude themselves and seek to disguise to themselves their own nothingness. The philosopher himself is an existent individual, a subject in a particular situation, and the most certain thing about him is that he will himself be reduced to nothingness. He must die. Nobody can die for him. He is, as an existent individual, alone and solitary, forlorn, cast out into the world, here rather than there, abandoned, condemned to die. Men recognize the universality and inevitability of death as a general proposition, as an objective fact. What is necessary, however, is to realize it subjectively, inwardly, as something that will happen to oneself, to *me*. The only certainty in life is death. When this inevitability is subjectively felt, the individual is possessed by an anguish, a universal dread, an infinite sorrow, a care-unto-death, an absolute despair. Out of this *angst*, *sörge*, despair, out of this sinking into subjectivity and inwardness can arise the encounter with reality, the grasping of life not as a problem to be solved but as a mystery to be experienced. Hence arises the genuine life of *ex-sistence*, the life of freedom, of real, subjective choice and committal, of *engagement* with reality. The act of choice is freedom. The choice does not become right on account of the thing chosen, on account of any objective quality in it. Freedom is the choice of the absurd, the irrational; it is encounter; it is faith.

Most men — particularly, academic philosophers and professional men—live unauthentically. They go through life wearing a mask, trying to be objective and treating themselves and others as objects, as things. In Kierkegaard's phrase : 'We have forgotten what it is to exist.' Neither the obedience

to outward moral laws nor conformity with external standards, neither social status nor theoretical knowledge, can give a man authenticity and freedom. Only on the other side of despair can real freedom begin. Existentialism thus confronts man with the questions of his own life, his individual sorrow and joy, despair and hope, situation and choice, necessity and freedom. While the mainstream of modern thought—scientific and philosophical — has been in the direction of the universal and the objective, the external universe, the world of objects and ideas, existentialism turns its face towards the individual, the personal, the subjective, the contingent, the irrational, the absurd, the paradox, the mystery of existence itself. Modern science has sought to know through reason. Existentialism wishes to know with the whole man, through his emotions and feelings just as well as by his reason. For, as Pascal put it: 'The heart hath its reasons, which the reason doth not know.'

There are different forms of existentialism, varying from the Christian or religious existentialism of Kierkegaard the nineteenth century Danish writer, of Karl Jaspers in Germany and Gabriel Marcel in France, to the atheistic and nihilistic existentialism of Heidegger and the humanistic existentialism of Jean-Paul Sartre in France.

Existentialism is a summons to life, not to thought. It is the most extreme reaction against logic and reason in modern philosophy. Its subjectivity is absolute and is the exact opposite of the objectivity of modern science. Nevertheless, there is much in it that is valuable and inspiring. Basically, existentialism is a religious philosophy. Its demand is ultimately the demand for fullness of life, for authenticity of individual existence, for genuine, personal and intra-personal living. It recognizes the necessity of grasping the irrational in life and calls us away from mere thinking and the playing of rôles, from unauthentic, mechanical existence. It does not claim to be a philosophical system. Indeed, it decries the value of philosophical systems. Existentialism is the cry of the heart, the anguish of the soul. It is not the kind of philosophy which is an answer to pure, 'disinterested', intellectual curiosity.

Mathematical logic with its perfect, *a priori*, formal,

universal and objective truths, and existentialism with its emphasis on the subjective, the contingent and the irrational, on faith, mystery, freedom and authenticity, are the antipodes, the two poles of mid-century philosophy. Where is the possibility of mediation between the two? Of their speaking or understanding a common language? If the exposition of the one has bemused, annoyed or befuddled the admirers of the other, my purpose has been amply served.

7. I should like very briefly to sum up the recent developments in ethics in order further to illustrate and expose the contemporary predicament in philosophy. The seminal work on ethics of the century was, without a doubt, Moore's *Principia Ethica*. In it, Moore outlined the subject-matter of ethics as (1) the meaning of good, (2) the discovery of things that are good in themselves, and (3) the discovery of the empirical means to the realization of the good. Common-sense would probably agree, and most philosophers at the time did agree, with this division.

The history of recent ethics, however, shows an almost exclusive concern with the preliminaries of ethics rather than with its substance. Almost the entire body of recent works on ethics has been concerned with the logical and linguistic analyses of ethical concepts and judgements, with the epistemological foundations of ethics rather than with its subject-matter proper. The upshot of the whole movement of philosophical analysis has been a number of logical analyses of the nature of ethical propositions or pseudo-propositions and a number of linguistic analyses or enumerations of the ways in which, or the contexts in which, ethical terms such as good, right, ought, etc. are employed. Whether the conclusion is that ethical judgements are pseudo-propositions, that ethical judgements are really psychological statements with an exclamation or exhortation appended, that ethical judgements are a form of imperatives, of commendations or prescriptions, or statements of pro- and con- attitudes, or that they relate to non-natural properties — is not my present point. It is that recent ethics has not really been dealing with the problems traditionally associated with moral philosophy. As in their discussions of metaphysics, so in their discussions of ethics,

contemporary philosophers have mainly been interested in beating about the bush, sometimes in the hope of starting the quarry, usually with a view to showing that there is no quarry at all. It would seem that we have all along been hunting after the bush itself, and mistakenly supposed that we have been hunting after a quarry.

8. What, then, is the predicament of philosophy in the mid-twentieth century? There is a complete sundering of logic and science from religion and ethics, of academic philosophy from the philosophy of life. According to the positivists, logical or linguistic analysis is the only legitimate function of philosophy. Knowledge is restricted to purely analytical statements — tautologies, definitions — and empirical statements to be verified by sense-experience. Statements about the whole of reality, judgements of value, statements about transcendental entities like God or the soul, are all alike pseudo-propositions. They may have emotional or other types of significance. But they can have no meaning as propositions. They are neither true nor false. Like an onion that is peeled, propositions expressed in ordinary language are analysed into their primitive logical forms. Sometimes, there is nothing left of the onion after the process of peeling — as in logical positivism; sometimes, bare sense-data or atomic facts are left as the sole ultimate realities—as in logical atomism.

Diametrically opposed to this trend is the entirely independent existentialist movement. Here we see the destruction of philosophy, theology, even of ethics, in the name of existence. Subjectivity, irrationality, and anti-intellectualism are its chief characteristics.

What, then, becomes of the age-old questions of philosophy, the primaevial enigmas of existence, the ultimate problems of life, of the nature of reality, of the significance and value of human existence ? ‘What sort of world is this?’ — asks Aldous Huxley — ‘What is the sense and point of the whole affair? And what is man’s place in it?’ Logical positivism brushes aside these questions as meaningless pseudo-problems. Existentialism invites us to abandon the questions and to plunge into subjectivity. It would seem that what satisfies the

mind of man cannot satisfy his heart, and what satisfies his heart cannot satisfy his mind, and nothing can satisfy his whole personality. Such is the predicament in which the philosopher of the mid-twentieth century finds himself.

9. Perhaps, however, the riddle is not altogether insoluble. I shall venture tentatively to outline a possible way out of the predicament in which present-day philosophy finds itself. If we examine more closely the tenets of logical positivism we shall discover that there are loopholes in it, logical lacunae in the system which may be filled by other forms of experience than just sensuous experience. Wittgenstein recognized this. He saw that behind the language-game is that which cannot itself be expressed in language. He concluded, therefore, with the somewhat cryptic sentence: 'Whereof one cannot speak, thereof one must be silent'.

That takes us back to the nature of language, its limitations, and the possibilities of extending its sphere. Language consists of signs or symbols whose final meaning can be appreciated only by direct acquaintance, through 'verification by experience', if you like. But what is the logical necessity of limiting experience to sensuous experience, of restricting acquaintance to the knowledge of particulars provided by sense-data? No logical positivist or logical atomist has established such a necessity. All empirical propositions — all propositions other than logical tautologies — especially, all existential propositions, it is asserted, can be established only by experience. But whose experience? And what kind of experience? The scientist demands that the conditions of scientific observation and verification must be fulfilled by any individual who seeks to verify scientific propositions. These include elaborate scientific training and the arduous cultivation of the scientific temper, of the attitude of scientific objectivity. Is not the religious man, the mystic, the philosopher concerned with the problems of value, entitled similarly to lay down conditions, conditions suited to his special task, in the sphere of his activities and interests? I see no logical objection to the conceding of such a claim on behalf of the moral philosopher, the metaphysician or the mystic. needs to be pointed out further that science itself does not

exclude a fundamental element of faith. The structure of science rests on a faith in a logical order of things — for instance, the Principles of Limited Independent Variety and of Atomic Uniformity cannot themselves be established logically. On what grounds can we concede such a faith in the interest of scientific requirements, yet deny it in other, and no less valuable spheres?

The usual criticism of the mystic is that his experiences, being unique, cannot be communicated. Mystical experiences, it is asserted, are subjective, incapable of objective verification, and therefore illusions or hallucinations. But is it not both audacious and dogmatic to dismiss all mystical experience as illusory, unless we have attempted to verify them by fulfilling the conditions of self-discipline and spiritual training insisted upon by the mystics themselves? Aristotle long ago stated that for the study of ethics the student must be not merely a man of intellectual discernment but also be of a certain maturity of moral character. Why should moral, religious and spiritual discernment be exempt from the conditions of rigorous training and discipline so insisted upon in the realm of science?

Far be it from me to suggest that if God cannot be found at the end of a syllogism, He can be found at the end of an experiment. (Mescalin cannot do more than malt or Milton!) There is still, beyond the sphere of *yoga* or spiritual discipline, the realm of Grace, and it may be that in the last lap spiritual enlightenment is a free gift of pure Love rather than an achievement by heroic effort. But those who do not undertake the discipline of self-transcendence should be more modest in condemning as illusory the fruits of the Spirit. They should at the least be content to judge the tree by its fruits, and to reap the values of the mystical life at one remove and at second-hand.

In regard to the ineffability of the mystical experience, I submit that it is not, in principle, more obscure and intractable than the problem of the incommunicability of individual experience, or, say, the intuitive understanding of values which is at the basis of ethics. There are experiences we can understand, though we cannot define them. (There is, for instance, no logical way out of an absolute solipsism, but we overleap the barriers of

solipsism and normally accept the real existence of other selves and other objects. Why can we not overleap the limitations of logic in regard to the reality of the mystical experience?) We understand them and are able to communicate with one another about them, because we have, or we assume that we can have, similar experiences. Hence, the mystic's language will be understood only when more individuals set themselves out to have the mystical experience by fulfilling the necessary condition of absolute self-surrender. Indeed, I should point out that the difficulties in regard to 'mystical' language are not really different from those that arise for the language of a logical atomist, for instance. If 'proper names' are names of absolute particulars, how can these fleeting, atomic elements of sense-data be named at all? There can be no 'proper names'. The variables of a logical language can never be substituted by nameable particulars. Therefore, apart from the tautologies of logic, the rest is silence.

In regard to existentialism, it would be obvious that even if it be only to advocate itself, existentialism would stand in need of general concepts, of metaphysics, of ethics and language. If it is asserted that the existent individual *should* exist authentically, that he *should* encounter reality, that he *should* 'transcend' himself, if as Sartre for instance wishes, men *should* grasp their freedom even though 'God is dead' — are not all these adjurations, injunctions of a moral kind, of a universal nature? The very advocacy of subjectivity implies that the principle is objective, that it is universal and true for all men.

I shall conclude with a quotation from the *Magnum Opus* of Roger Bacon, the thirteenth century philosopher and man of science, and would request the reader to ponder over its full implications.

Having laid down fundamental principles of the wisdom of the Latins so far as they are found in language, mathematics and optics, I now wish to unfold the principles of experimental science, since without experience nothing can be sufficiently known. For there are two modes of acquiring knowledge, namely, by reasoning and experience. Reasoning draws a conclusion and makes us grant the conclusion, but does not make the conclusion certain, nor does it remove doubt so that the mind may rest on the intuition of truth, unless the mind discovers it by the

path of experience; since many have the arguments relating to what can be known, but because they lack experience they neglect the arguments and neither avoid what is harmful, nor follow what is good. For if a man who has never seen a fire should prove by adequate reasoning that fire burns and injures things and destroys them, his mind would not be satisfied thereby, nor would he avoid fire, until he placed his hand or some combustible substance in the fire, so that he might prove by experience that which reasoning taught. But when he has actual experience of combustion his mind is made certain and rests in the full light of truth. Therefore, reasoning does not suffice but experience does.

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THE ANCIENT TRAVELLER

By N. G. SURU

In this article, I propose to give a few glimpses of the Ancient Traveller with reference to the means of travelling at his disposal, the difficulties he had to contend with and the sufferings he had to bear in the course of his journey and temporary sojourns, the heart-burning agonies he inflicted on those he left behind, the happy end of his journey and the joy he gave when he rejoined his people. My attention was drawn to this theme by the well-known exhortation¹ of the teacher to his Śāṅkaka pupil on the eve of his departure from his school-residence, in which the student was asked to revere the Traveller-guest as a God, as also by the story of Naciketas who, left unattended and without food for three nights in the house of Yama, ate up his progeny, cattle and good works.² The glorification of hospitality, which is so proverbial in our land, has, therefore, to be traced to such injunctions and stories which elevate the guest to the high pedestal and position of a God, to be worshipped as such immediately on his arrival by a Madhuparka ceremony — Samārīṣa or otherwise. This was felt necessary

१ मातृदेवो भव । पितृदेवो भव । आचार्यदेवो भव । अतिथिदेवो भव ॥
तैत्तिरीयोपनिषद् I. 11. 2.

२ तस्य ह तिलो रात्रीरनाशवान् गृह उवास । तमागत्य पप्रच्छ ।.....कि
प्रथमांश्चरात्रिमाश्वा इति । प्रजां त इति । कि द्वितीयामिति । पशूऽस्त इति ।
कि तीतीयामिति । साधकृत्यां त इति । तैत्तिरीय-ब्राह्मण III. 11. 8.

because of the fact that travelling in those days was immensely difficult and risky and the traveller, therefore, needed to be rested and comforted on his journey by the householder who, having established a home, was enjoined to look upon hospitality to the Atithi as his sacred, religious duty.³ Atithi, according to Yāska, originally meant a traveller. "One who wanders over to other peoples' houses or one who observes no particular *tithi* in the matter of visiting others' houses, i. e. goes to them on special holy days even, is an Atithi."⁴ A person who comes at any odd, irregular hour is an Atithi, to be distinguished from Prāghūrṇika or Abhyāgata who comes with previous intimation or on invitation.⁵ In this respect, no distinction as regards the caste to which the guest belongs, is to be made. Even a Candāla has to be treated and honoured.⁶ Such a guest will not, however, ordinarily stay for more than one night with his host, especially if he is a mendicant.

३ यथा भर्ता प्रभुः स्त्रीणां वर्णनां ब्राह्मणो यथा ।

अतिथिस्तदुदेवास्य गृहस्थस्य प्रभः समतः ॥

शंखमंहित. V. 7.

तस्मात् सर्वप्रयत्नेन गृहस्थोऽतिथिमागतम् ।

आहारशयनार्थेन विधिवत् परिपूजयेत् ॥

Ibid. V. 13.

४ अतिथिः अभ्यतितः गृहान् भवति । अभ्येति तिथिषु परकुलनिनिश्चिक्षा वा । निश्चिक्षा IV. 5.

on this क्षीरस्वामी comments thus —

नास्ति तिथिः अस्य अतिथिः ।

अतति सततं गच्छति वा । अध्वनीनो अतिथिश्चेयः ।

तिथिपर्वोत्सवाः सर्वे त्यक्ता येन महात्मना

अतिथिः स हि विज्ञेयः शेषः प्राधर्णिकः स्मृतः ॥

Also cf. एकरात्रं तु निवसन् अतिथिभृत्यणः स्मृतः।

अनित्यं हि स्थितो यस्मात्स्मादतिथिरुच्यते ॥ मनु III.112.

५ अभ्यागतो ज्ञातपूर्वस्त्वज्ञातोऽतिथिरुच्यते । वृद्धगौतमसंहिता Ch.VI.

६ चण्डालोऽप्यतिथिः प्राप्तो देशकालौ च काढःक्षया ।

अभ्युदगतो गृहस्थेन पूजनीयः स सर्वथा ॥ वद्धगौतमसंहिता Ch. VI.

With layers of dust on his feet, he comes tired and exhausted and announces himself.⁷ He cannot be ignored, otherwise he may pronounce a vicious curse on the householder, as did Durvāsas on Śakuntalā. His feet are to be washed by the host who may then worship him with flowers and give him fruit and other eatables, after which he is to be rested in the house. That is the way the guest will be welcomed and honoured, the way shown by the Āshrama girls, Anasūyā and Priyārvadā, when Duṣyanta comes over to their hermitage,⁸ or the way Ātreyī is received by Vāsantī,⁹ the Goddess presiding over the Dandaka forest.

The means of travel were, of course, very limited, if we are not to speak of those unreal and imaginary ones described in our mythology. There we find that not only gods, like Indra and Sūrya, the eternal Traveller, but even high mortals like Purūravas and Duṣyanta travelled through the air in aerial cars drawn by horses, while semi-divine beings like Gandharvas, Vidyādharaś and Apsarasas knew of the

७ Cf. यस्तु पांसुलपादस्तु दूराध्वश्रमकर्शितः ।
 क्षुत्पियासाभ्रमार्तंश्च श्रमखिन्नमतिद्विजः ॥
तं पूजयति वास्नेन सोऽतिथिः स्वर्गसंक्रमः ।
 तर्त्स्मस्तुष्टे नरश्चेष्ठ तुष्टाः स्युः सर्वदेवताः ॥
पादोदकं पादधृतं जीवमन्नं प्रतिश्रयम् ।
 ये प्रयच्छन्ति विप्रेभ्यो नोपसर्पति तान् यमः ॥

बृद्धगौतमसंहिता Ch. VI.

८ अनसूया- दाणि अदिधिविसेसलाहेण । हला सउन्दले, गच्छ उडअं ।
 फलमिस्तं अग्धं उवहर । इदं पादोदइं भविस्सदि । अभिज्ञानशाकुन्तल Act I.

९ बनदेवता- स्वागतं तपोधनायाः । (अध्यं विकीर्यं ।)
 यथेच्छाभोग्यं वा बनमिदमयं मे सुदिवसः
 सतां सद्भिः सङ्घः कथमपि हि पुण्येन भवति ।
 तरुच्छाया तोयं यदपि तपसां योग्यमशनं
 फलं वा मूलं वा तदपि न पराधीनमिह वः ॥

उत्तररामचरित Act II.1.

magic lore by which they could bodily lift and transfer themselves through the air in a flight from one place to another. Even men and women endowed with Yogic powers are credited with this facility of travel.¹⁰

Things were not so, however, with ordinary human beings. The princely class or the rich aristocratic class moved in chariots drawn by horses, while the upper classes had cushioned carriages at their disposal, to which bullocks were attached. In the Mṛchhakaṭika, the King's brother - in - law, Śakāra and the hero Cāurdatta had a Yāna or Śakata for which a pair of bullocks is used. The camel as 'a ship of the desert' was also frequently used by people living in the vicinity of the desert tracts of the North, going in caravans, and ships with sails figured in sea-voyages. Horse-riding was, of course, a common method of travel, especially in the army where the chariot, the elephant and the horse are the recognised constituents of the fighting force. Processions on elephants or in palanquins¹¹ for the fair sex of the royalty and the nobility are also often described in Sanskrit literature. The donkey has never been favoured for this purpose. In fact, it is looked upon as a mark of derogation to ride an ass.¹²

१० As was the case of सौदामिनी and कपालकुण्डला in the मालतीमाधव. चित्रलेखा, a confidante of उषा, could even bring अनिश्च �asleep on his bed through the air.

११ cf. ततो मिलितवेत्रशस्त्रपाणिर्वर्षवरप्रायपुरुषपरिवारा गजवधूमाख्यहू नगरगामिनं मार्गमिन्दुवदनाऽलङ्घतवती ॥ मालतीमाधव Act I.
and
मनुष्यवाहां चतुरस्यानमध्यास्य कन्या परिवारश्चेभि ।

विवेश मञ्चान्तरराजमार्गं पतिवरा क्लृप्तविवाहवेषा ॥ रघुवंश VI.10.

१२ As is borne out by the oft-quoted सुभाषित-
घटं भिन्न्यात् पटं छिन्न्यात् कुर्याद् रासभरोहणम् ।
येन केन प्रकारेण प्रसिद्धः पुरुषो भवेत् ॥

The bullock also was perhaps rarely used, although the great god Śiva¹³ is known to ride his favourite bull when He goes abroad along with his divine consort Pārvatī.¹³ The ordinary bullock-cart was the only easy and cheap means for the people and was utilized mostly by merchants going in a caravan of carts laden with merchandise. For a man of meagre means, for a student going a long distance in search of a Guru,¹⁴ for an ascetic going from one hermitage to another or for a young merchant seeking some opening or scope for his talent in a foreign land, the only recourse was a resort to his legs. Rāma goes in a chariot as far as the Śrigiberapura, but the rest of the hazardous journey down South is done by him, accompanied by Sītā and Lakṣmaṇa, on foot.¹⁵

This, we can say, therefore, was the most common means and method of travel in ancient days. The difficulties and dangers of travelling in those days could be

१३ cf. इयं च तेज्या पुरतो विडम्बना यद्गृह्णया वारणराजहायंया ।

विलोक्य वृद्धोक्षमधिष्ठितं त्वया महाजनः स्मेरमुखो भविष्यति ॥
कुमारसंभव V.70.

१४ For instance आत्रेयी going to the hermitage of the sage अगस्त्य from the hermitage of वाल्मीकि.

उत्तररामचरित Act II.

१५ cf. तत्र त्रिपथगां दिव्यां शिवतोयामशेवलाम् ।

ददर्श राघवो गडगां पुण्यामृषिनिषेचिताम् ॥
.....समुद्रमहिर्षीं गडगां सारसक्रौञ्चनादिताम् ।
आससाद महाबाहुः शृङ्गिबेरपुरं प्रति ॥
अविद्वराद्यं नद्या बहुपुण्यप्रवालवान् ।
सुमहानिङ्गुदीवृक्षो वसामोऽत्रैव सारथे ॥

रामायण, अयोध्याकांड Ch. 50.

.....निवर्त्स्वेत्युदाचैनमेतावद्वि कृतं मम ।

रथं विहाय पद्म्यां तु गमिष्यामो महावनम् ॥

रामायण, अयोध्याकांड Ch. 51.

easily imagined. Bad roads, big, unfordable rivers, dense forests infested by venomous reptiles or wild, carnivorous beasts, bands of Bhils or Sabaras attacking, despoiling and even murdering the travellers, and the kidnapping of women for being held as hostages and put to ransom, were common features of the journey. In towns and villages, where benevolence ruled, there were rest-houses, public wells, tanks and free boarding houses for the relief of the traveller, while in the absence of such arrangements, some kind gentle souls admitted and accommodated them at times even in their own houses, instead of asking them to seek shelter in a far-off temple or similar unfrequented places. With such hazards on the way, one could easily imagine how the casualties among the travellers must have been frequent and many, especially because in the matter of communications, there were no facilities whatsoever. It might happen that, by chance, he met a fellow-traveller who was going to his place on the way and then he might agree to convey a message to his people, or his people also may do likewise. The great Poet gives to the distressed Yakṣa, the cloud as a messenger to convey the message¹⁶ of his life and love to his bereaved beloved ! Normally, however, there could be no contact possible between the traveller and his people at home, and when he went, they would in their heart of hearts take him up as very nearly lost to them, unless he rejoined them — generally before the next advent of the rains. No wonder then that scenes of parting on the day of the man's departure, were very sad and deeply tinged with intense emotion, which the Sanskrit and Prākṛit poets have not failed to utilise in their poetic treatment of the Traveller, marked as it is with a good deal of humour.

Look at some of these scenes, for instance, as pictured by our poets in words, of what happens to his dearest beloved when she has heard that the man is soon to leave on a long journey.

१६ मार्गं तावच्छृणु कथयतस्त्वत्प्रयाणानुरूपं

संदेशं मे तदनु जलद शोष्यसि श्रोत्रपेयम् ॥ मेघदूत 1. 13.

१७ “The moment she heard that he is soon to depart, she falls in a swoon, and having awakened, she asks him, “Have you come back at long last?”

१८ “When the man asked her if he could go, she was so shocked that it appeared there was a keen fight going on between her life and her words, to escape from the throat first” !

१९ “Unrestrained she wept, holding him by the skirt of his garment and she closed his mouth with her fingers, imploring him not to go. She stood up and dropped down before him in passive resistance. What was it she didn’t do to dissuade him, when her lord tried to leave?”

२० “But when she found that with all her pleadings and embraces, the cruel one persisted, she released him only after releasing her hold on her own life.”

२१ “She gave no sighs nor were there tears in her eyes. She only lifted her hand to her forehead to count, as it were, the number of years left on the record of her life.”

१७ मुरधा कान्तस्य यात्रोवितश्रवणादेव मूर्च्छता ।
बुद्ध्वा वक्ति प्रियं दृष्ट्वा किं चिरेणागतो भवान् ॥
सुभाषितरत्नभा

१८ यामीति प्रियपृष्ठायाः कान्तायाः कण्ठवर्त्मनि ।
वचोजीवितयोरासीद् बहिनिःसरणे रणः ॥ सुभा.

१९ लज्जां विहाय रुदितं विधृतः पटान्ते
मा गास्त्वमित्युदितपङ्गुलयो मुखेऽस्ताः ।
स्थित्वा पुरः पतितमेव निवत्तनाय
प्राणेश्वरे ब्रजति किं न कृतं कृशाङ्ग्या ॥ सुभा.

२० दृष्टः कातरनेत्रया चिरतरं बद्धाङ्गजलं याचितः
पश्चादांशुकपल्लवेः दिधृतो निवर्याजमालिङ्गितः ।
इत्याक्षिप्य समस्तमर्थमधृणो गन्तुं प्रवृत्तः शठः
पूर्वं प्राणपरिग्रहो दयितया मुक्तस्ततो बल्लभः ॥ सुभा.

२१ गन्तं प्रिये वदति निःश्वसितं न दीर्घ-
मासीन्न वा नयनयोर्जलमाविरासीत् ।
आर्युलिंपि पठितुमेणदृशः परंतु
भालस्थलीं किमु करः समुपाजगाम ॥ सुभा.

22 "When he asked for her leave to go, with endearing words of consolation, the girl turned her face away, checking the flood of tears, her nostrils throbbing in her attempt to suppress the heavy sighs of grief and she began moving her bracelets on the wrists without any attempt to count."

23 "Her bracelets, so dear to him, dashed off from her hand; the tears flowed forth continuously. The joy went away and her heart too decided to go ahead of him. All these thus started to go when the dear one wanted to leave. Would you leave behind the dearest friends of your heart when you must go?"

21 "He was to go at sunrise; when she heard, therefore, the notes of early morning birds, she began trembling all over and with hot tears from her eyes falling on his shoulder, she broke off his sleep."

25 "Having come to know of the time of his departure, the girl saw for a long time the face of her man in her bed and then, sighing and grieving she rested her face washed with tears on his bosom and mutely wept."

२२ सान्त्वप्रायैः प्रणयवचनर्गन्तुमापृच्छमाने
कान्ते तिर्थंनमितवदना रुद्धती बाष्पपूरम् ।
दीर्घोच्छ्वासस्थगनविकलोत्कम्पिनासापुटान्ता
संस्थाशून्यं गणयति मृगीलोचना कङ्कणानि ॥ सुभा०

२३ प्रस्थानं वलयैः कृतं प्रियसखैरल्लेजलं गतं
धृत्या न क्षणमासितं व्यवसितं चित्तेन गन्तुं पुरः ।
यातुं निश्चितचेतसि प्रियतमे सर्वे समं प्रस्थिता
गन्तव्ये सति जीवितप्रियसुहृत्सार्थः किमु त्यज्यते ॥ अमरु०

२४ गन्तुविवस्वदुदये हृदयेश्वरस्य प्रत्यषष्ठक्षिनिनदश्वजातकम्पा ।
निद्रां जलैरशिशिरैन्यनाबजजातेः कान्ता तदंशिखरे पतितर्जहार ॥
सुभा०

२५ आयाते श्रुतिगोचरं प्रियतमप्रस्थानकाले बलात्
तल्पान्तस्थितया तया जनमलं दृष्ट्वा चिरं मुखया ।
सोच्छ्वासं दृढमन्युनिर्भरगलद्वाष्पाम्बुधौतं तया
स्वं वक्त्रं विनिवेश्य भर्तृहृदये निःशब्दकं रुद्यते ॥ सुभा०

²⁶ “ Her friends and relatives she left behind at her father's place when she married; and she has not yet developed friendship with any girl in her husband's house. Whom is she to talk to of her heart's agony when the very man for whom love had sprung up in her heart within the last few days, is going away on a long journey?”

× × × ×

Yet, confronted with this painful situation, she speaks to her man. And this is how she addressed him :—

²⁷ “ You may go, my lord, if you must. May your journey be happy and may I be reborn in the very place where you go! ”

²⁸ “ I'll bear the agony of your separation. Only give me the magic ointment of invisibility, which I would put in my eyes. Cupid, then, will not be able to strike at me.”

²⁹ “ You have suddenly decided to go away in this season of spring! But I have no fears now (of surviving), to bear the torment any more, since here is a lovely breeze from the lake wafting the best fragrance of lotuses, along with the clear bright moon-light spreading resplendence over nights. ”

२६ पितुरधिपुरं त्यक्ताः सख्यः समं निजबान्धवै-
नं च परिचितिर्जाता पत्युर्गृहेऽपि क्याचन ।
कतिपयदिनोदञ्चत्रेम्णि प्रिये प्रवसत्यसौ
कथयतु मनस्तापं करम् नवं नवकामिनी ॥ सुभा.

२७ गच्छ गच्छसि चेत् कान्त पन्थानः सन्तु ते शिवाः ।
ममापि जन्म तत्रैव भूयाद् यत्र गतो भवान् ॥ सुभा.

२८ सहिष्ये विरहं नाथ देहघदृश्याञ्जनं मम ।
यदक्तनेत्रां कन्दर्पः प्रहर्तुं मां न शक्यति ॥ सुभा.

२९ एतस्मिन् सहसा वसन्तसमये प्राणेश देशान्तरं
गन्तुं त्वं यतसे तथापि न भयं तापात् प्रपद्येऽवुना ।
यस्मात् कैरवसारसौरभमुषा साकं सरोवायुना
चान्नी दिक्षु विजूम्भते रजनिषु स्वच्छा मयूखच्छटा ॥ सुभा.

³⁰ “ It is those low women who would prevent their lords from going, with trickling tears, oaths and prostrations at their feet. (I am not that.) This is a good auspicious day when you must go. And when you have gone early morning, you will soon hear what I have cherished most in my heart, worthy of my love for you.”

³¹ “ It would indeed be an inauspicious, love-less utterance, my friend, if I say ‘ Do not go ! ’ ‘ Stay here ’ would mean my domination over you. ‘ Do as you like ’ would spell indifference on my part. ‘ I will not live without you ’ may not materialise in reality. Teach me, therefore, my lord, the proper words to say at this moment when you are going. ”

³² “ Don’t obstruct me. Permit me to weep today. I promise, when he has gone, I shall not weep tommorrow, if am not dead.”

× × × ×

At times, even her girl-friend intercedes and pleads for her sake, with interesting arguments to dissuade him from going. This is what she would say :—

³³ “ Why should you spend your days in a foreign land for greed of wealth? You have a gold creeper at your door, showering pearl-clusters! ”

३० लोलैर्चनवारिभिश्व शपथः पादश्रणामः परं—

रन्यास्ता विनिवारयन्ति कृपणः प्राणेश्वरं प्रस्थितम् ।

पुण्याहं व्रज मण्डगलं सुदिवसः प्रातः प्रयातस्य यत्

त्वत्स्नेहोचितमीहितं प्रिय मया त्वं निर्गतः श्रोत्प्रसि ॥ सुभा.

३१ ‘मा याहो’त्यपमङ्गलं बत सखे स्नेहेन हीनं वचः

‘तिष्ठे’ति प्रभुता ‘यथारुचि कुरुज्ज्वेषाप्युदासीनता ।

‘नो जीवामि विना त्वये’ति वचनं संभाव्यते वा न वा

तन्मां शिक्षय नाथ यत्समुचितं वक्तुं त्वयि प्रस्थिते ॥ सुभा.

३२ अज्जं पि ताव एकं मा मं वारेहि पिअसहि रुअन्तिम् ।

कल्लं उण तम्मि गए जइ ण मुआ ता ण रोइस्सं ॥ गाथासप्त. VI.2.

३३ किमिति सखे परदेशे गमयसि दिवसान् धनाशया लुब्धः ।

वर्षति मौकितकनिकरं तव भवनद्वारि काङ्क्षतो वल्लो ॥ सुभा.

३४ “ Such rosy lustre of lips, which a coral-gem may not get even in a dream, such splendour of smiles which pearls will not develop even with austerities, that loveliness which gold will not attain even if it fell a hundred times in fire! For what wealth do you go out, leaving this jewel of a beloved? ”

३५ “ Don’t go, O Ladies’ man, I beseech you in a hundred sweet words. See the wretched condition the girl has gone to, as soon as you stepped out in the court-yard. You know, moreover, we have exhausted our stock of threads, stitching up her bodices every day, as they snap under the pressure of her bosom caused by the aching of Love ”.

This friendly intervention, along with many other factors, subjective and objective, at times succeeds in the man’s cancelling his intended tour. His friends, who are surprised to find him at his home when he was supposed to have gone away, ask him the reasons why he suspended his journey and they are given, in all confidence, a very lively account of the causes, in this way :

३६ “ You may go; but would you be back in a Prahara, or by midday, or a little later or at least at the end of the day? ” With these words uttered with flowing tears from her eyes, the girl puts a stop to his journey which would take a hundred days to reach the destination!

- ३४ या विम्बोष्ठहन्ति: कव विदुममणि: स्वप्नेऽपि तां लब्धवान्
हासश्रीसदृशस्तपोभिरपि कि मुक्ताफलंभूयते ।
तत्कान्तिः शतशोऽपि वह्निपतनैर्हेम्नः कुतः सेत्यति
त्यक्त्वा रत्नमयीं प्रयासि ददितां कस्मै धनायाध्वग ॥ सुभा.
- ३५ मा गच्छ प्रमदाप्रिय प्रियशत्तरःभ्यथितस्त्वं मया
बाला प्राङ्गणमागतेन भवता प्राप्नोत्यवस्थां पराम् ।
कि चास्याः कुचभारनिःसहतरेष्ट्वानद्वाग्नाकुलं-
स्त्रुट्यत्कञ्जुकजालकंरनुदिनं निःसूत्रमस्मद्गृहम् ॥ सुभा.
- ३६ ‘प्रहरविरती मध्ये वाह्नस्ततोपि परेण वा
किमुत सकले यातेऽप्यह्नि प्रिय त्वमिहैष्यसि’ ।
इति दिनशतप्राप्यं देशं प्रियस्य यियासतो
हरति गमनं बालाऽलापैः सबाष्यम्नलज्जालः ॥ अमरु.

³⁷ "She did not cling to his skirt, nor did she put up her delicate hand at the door to bar his exit. She did not fall at his feet nor did she say 'O stop, don't go,' It was the rainy season darkened with rows of clouds when the rogue wanted to go. She prevented his going by a river-flood made by the flowing streams of tears from her eyes !"

³⁸ "He went to-day, he went to-day, he went to-day !" Thus counting she drew many lines on the wall on the very first day even before half of it was over ! "

³⁹ " You have strayed far away from the town, my lovely one; here is the banyan tree from where you must go back now." Thus saying he held her in a close embrace and saw her bosom with its covering bodice bursting by her pressing circling breasts and watched her face flooded with tears. Immediately he cancelled his journey.

⁴⁰ " I go now, my beloved; but know for certain that I shall return on the first day of the rains. Do not worry on my account." As I was telling this to her with tears in my eyes, her sighs became winds, the whole body turned into a Kadamba tree, her bodily complexion paled into that of a Ketaka leaf and eyes became showering clouds !"

३७ लग्ना नांशुकपल्लवे भुजलता नो द्वारदेशेऽपिता
नो वा पादयुगे तथा निपतिं 'तिष्ठे'ति नोक्तं वचः ।
काले केवलमम्बुदालिमलिने गन्तु प्रवृत्तः शठ-

स्तन्या बाट्पजलौघकलिपतनदीपूरणे रुद्धः प्रियः ॥ सुभा.

३८ अज्ज गओ ति अज्ज गओ ति अज्ज गओ ति गणिरीए ।
पढम व्विअ दिअहद्दे कुड्हो रेहाहिं चित्तलिओ ॥ गा. स. III.8.

३९ 'दूरं सुन्दरि निर्गतासि नगरादेष द्रुमः क्षीरवान्
अस्मादेव निवर्त्यता'मिति शनैरुक्त्वाऽध्यगेन प्रियाम् ।
गाढालङ्घनचक्रितस्तनतटाभोगस्फुटत्कञ्चुकं

बीक्ष्योरःस्थलमशुपूरितदृशः प्रस्थानभङ्गः कृतः ॥ सुभा.

४० 'यामि प्रेयसि वारिदागमदिने जानीहि मामागतं
चिन्तां चेतसि मा विधेहि' कथयत्येवं सबाष्यं मयि ।
निःश्वासैः पवनायितं वरतनोरझांगः कदम्बायितं
कान्त्या केतकपत्रकायितमहो दृग्भ्यां पयोदायितम् ॥ सुभा.

⁴¹ When I said 'I am going', she gave out a heavy sigh and looking at me side-ways with one eye filled with tears, she spoke this ironically to her young fawn, affectionately reared up by her, : "Your love, my young one, so long bestowed on me, may henceforth be transferred to my friends now,"

A fine analysis, indeed, of the feelings that toss the human heart under the stress of impending separation. The great poet Kālidāsa gives us a masterly depiction of a similar situation when the father bids farewell to his child Śakuntalā who, too on her part, takes leave of her young fawn,⁴² along with many others.

But in spite of such persuasions, entreaties and temptations, some young men prove intransigent. They have a powerful urge perhaps to build up a career, to amass wealth and acquire fame. The merchant class is the greatest offender in this respect. Vasantasenā refuses to have a young merchant as her lover for his ruthlessness in inflicting pangs of separation on his beloved.⁴³

He goes out generally when the rains are over and the first season he has to contend with, is the cold one. The whole day, he drudges along through fields, hills and valleys and at night he rests, many a time in a village temple. And⁴⁴ "as the cold frosty wind is blowing outside,

४१ गच्छामीति मयोक्तया मृगदृशा निःश्वासमुद्रेकिणं
त्यवत्वा तिर्यगवेक्ष्य बाषपकलुषेणकेन मां चक्षुषा ।

'अद्य प्रेम मदर्पितं प्रियसखीवृन्दे त्वया बध्यताम् '

इत्यं स्नेहविवर्धितो मृगशिशुः सोत्प्रासमाभाषितः ॥ सुभा.

४२ वच्छ, कि सहवासपरिच्चाइणि मं अणुसरसि । अचिरप्पसूदाए
जणणीए विगा विवड्डिदो एव । दार्णि पि मए विरहिदं तुमं
तादो चिन्तइस्सदि । जिवत्तेहि दाव ॥ अभिज्ञानशाकुन्तल IV.

४३ हञ्जे, उवारुढसिणेहं पि पणझज्जनं परिच्चवइआ देसंतरगमणेण
वाणिअजणो महंतं विओअदुख्यं उप्पादेदि ॥ मृच्छ. II

४४ संविष्टो श्रामदेव्याः कुटघटितकुटीकुड्यकोणैकदेशे
शीते संवाति वायौ हिमकणिनि रणहन्तपङ्कितद्वयापः ।
पान्थः कन्थां निशीये परिकुथितजरत्तन्तुसंतानगुर्वो
श्रीवापादाग्रजानुग्रहणचटचटकर्पटां प्रावृणोति ॥ सुभा.

huddled up he sleeps in a corner drawing his head, feet and knees together, covering himself with a tattered thread-bare blanket, which often gives way as he wriggles within, with chattering rows of teeth."

⁴⁵In the morning he gets up most reluctantly and finding the blazing fire nearabout, he rushes with outstretched hands to drink in, as it were, the beard-singeing flames.⁴⁶

In contrast with these hardships are those others he has to bear in summer. "The ⁴⁷ streams have mostly dried up, the dust under his feet is hot, the sun is blazing and the water he gets is steaming. He travels, wetting at water-places the piece of cloth which he keeps on his chest and though drinking, he feels thirsty every minute, as he goes on shouting Ha ! Ha! all the time."

The spring season is a veritable ordeal for the poor traveller. "The⁴⁸ gorgeous splendour which blossoms on every tree, the pleasant fragrant breezes from the South, the humming of bees and the cooing of cuckoos, all combine to accentuate the agony of the traveller and his beloved left behind, as the days are spent by him brooding over the pleasures lost. '

४५ आहूतोऽपि सहाय्यरेसीत्युक्त्वा विमुक्तनिद्रोऽपि ।

गन्तुमना अपि पथिकः संकोचं नैव शिथिल्यति ॥ सुभा.

४६ अन्योन्याहतिदन्तनादमुखरं वक्रं मुखं कुर्वता

नेत्रे साश्रुकणे निमोल्य पुलकव्यासङ्गि कण्डूयता ।

हा हा हेति सुनिष्ठुरं विवदता बाहू प्रसार्य क्षणं

पुष्पाग्निः पथिकेन पीयत इव ज्वालाहतश्मशुणा ॥ सुभा.

४७ शृष्ट्यत्स्त्रोतसि तप्तभूमिरजसि ज्वालायमानाणसि

ग्रीष्मे मासि ततार्कतेजसि कथं पान्थ व्रजन् जीवसि ॥

and

कृत्वा कृत्वा जलाद्र्वकृतमुरसि जरत्कर्पटाधीं प्रपायां

तोयं जग्धवाऽपि पान्थः पथि वहति ह हा हेति कुर्वन् पिपासुः ॥ सुभा.

४८ उन्मीलन्मधुगन्धलुधमधुपव्याधूतचूताङ्कुर-

क्रीडत्कोकिलकाकलकलैरुद्गीर्णकर्णज्वराः ।

नीयन्ते पथिकः कथंकथमपि ध्यानावधानक्षण-

प्राप्तप्राणसमासमागमरसोल्लासैरमी वासराः ॥ जयदेव.

“⁴⁹“ If the girl at home dies as a result of the pangs of separation, whose sin would it be ?” Before the Traveller has thought of it, the cuckoo has shouted from the tree-top—“ Tava, Tava (Yours and yours alone,” or Tuhi, Tuhi).

⁵⁰Her thin slender body, the prominent bosom, lovely lotus-like eyes, the slow graceful gait and her sweet voice ”—Thus as he pictures her with rosy lips before his mind, he is thrilled and he weeps and he smiles and raves in the end !

Why, even the sight of the mango-blossom is enough to kill him in his present state ! Herc he dies and no cause of his death could be diagnosed !

⁵¹“ The man with some internal disease goes thin; if wounded, he bleeds; if bitten, the saliva flows from his mouth. No such cause exists for his death. Ah ! we know now. Here in the din of the bees’ humming sounds, this fellow dared to fix his gaze on a mango-blossom !”

४९ वसन्तप्रारम्भे चिरविरहिन्ना सहचरी
यदि प्राणान् मुञ्चेतदिह वधभागी भवति कः ।
वयो वा स्नेहो वा कुमुमविशिखो देति विमृशन्
तुहीति प्रव्यक्तं पिकनिकरक्षांकारमशृणोत् ॥ सुभा.

Or

अध्वन्यस्य वधूवियोगविधुरा भर्तुः स्मरन्ती यदि
प्राणानुज्ञति कस्य तत् खलु महत् संजायते पातकम् ।
यावन्नो कृतमध्वगेन हृदये तावत्तरोमधुर्धनि
प्रोद्धुष्टं परपुष्टया ‘तव तवे’त्युच्चर्वचोऽनेकशः ॥ सुभा.

५० सा तन्वीति घनस्तनीति विकसन्नीलाज्जनेत्रेति च
स्वैरं संचरतीति वक्ति मधुरां वाचं विचित्रामपि ।
इत्थं विद्वमपाटलाधरपुटां सीमन्तिनीं ध्यायते
रोमाङ्गचो रुदितं स्मितं प्रलपितं पान्थस्य संजायते ॥ सुभा.

५१ सव्याधे: कृशता क्षतस्य रुधिरं दष्टस्य लालासत्रुतिः
किंचिन्नैतदिहास्ति तत्कथमसौ पान्थस्तपस्वी मृतः ।
आ ज्ञातं, मधुलम्पटमधुकररारबधकोलाहले
नूनं साहसिकेन चूतमुकुले दृष्टिः समारोपिता ॥ सुभा.

This season, therefore, marks the end of his journey. He must go back before the advent of the rainy cloud. Woe betide the man who is forced to stay away even during the rains !

⁵²" He may not then expect his beloved to live any more in this season, when the clouds are rumbling, the peacocks are giving their shrill notes and jasmines are blossoming in bunches !" The very sight of the clouds,^{52A} as Kālidāsa says, fills the person with longings. In bereavement, therefore, the torment is acute.

⁵³" When she hears the thunder at night she throws herself on her bed, supported by her friends as she cries unrestrained, remembering all the time her absent lord, the falling tears being shattered into particles on her hard bosom."

⁵⁴" The fair one frets and fumes at heart while the cloud rumbles above in the sky. Such be the hard risks of the traveller in the rains."

⁵⁵" Stop your showers, O clouds, as they are in vain. Better go to any other quarter that you like. There is not a single patch of a forest, road or ground which is not flooded by tears shed by this girl in separation ! "

५२ शिखिनि कूजति गर्जति तोयदे, स्फुटति जातिलताकुसुमाकरे ।
अहह पान्थ न जीवति ते प्रिया, न भसि मासि न यासि गृहं यदि ॥ सुभा.

52-A मेघालोके भवति सुखिनोऽप्यन्यथावृत्ति चेतः ।

५३ श्रुत्वा तन्वा निशीथे नवघनरसितं विश्लथाङ्गं पतित्वा
शय्यायां भूमिपृष्ठे करतलधृतया दुःखितालीजनेन ।
सोक्तकण्ठं मुक्तकण्ठं कठिनकुचतटाधातशीर्णश्रुबिन्दु
स्मृत्वा स्मृत्वा प्रियस्य स्वलितमृदुवचो रुद्यते पान्थवध्वा ॥ सुभा.

५४ हिअइ खुडुकइ गोरडी गयणि घुडुकइ मेहु ।
वासारत्तिपदासुअहं विसमा संकडु एहु ॥ हेमचन्द्र प्रा.व्या. IV

५५ विरमत धनाः किं वो वृष्टया मुर्धैव विसृष्टया
व्रजत कुकुभं कामप्यन्यां मनोरुचिरामतः ।

तदिह न बनं नासौ मार्गो न तच्च धरातलं
विरहगलितस्तन्वा यन्न प्लुतं नयनाम्बुभिः ॥ सुभा.

⁵⁶ “ I thought, my dear, there would be some relief for the separated ones at least after sunset. But the moon too torments me just like the sun at the close of the day !”

⁵⁷ Why do you, O Cātaka bird, cry saying “Piu, Piu,” helplessly ? Your desire for water (Pibāmai) and mine for my lover (Priya) have not been fulfilled.”

⁵⁸ “ The bangles are reduced to powder as she kept her hand on her cheek; because they were heated by the fire of her sighs and sprinkled with the water of tears !”

⁵⁹ “ The month of Śrāvana in one eye and the Bhādrapada in the other; the spring is spread on her bed and autumn shines on her cheeks. Her limbs are gripped by summer while winter sets on her lotus-like face.”

⁶⁰ “ You have hundred times said to me, O heart, that you would burst if my man would go away. That was a mere prattle, since you seem to have some miraculous strength !”

५६ मँ जाणिउ पिअ विरहिअहं क वि धर होइ विआले ।
णवर मिअंकु वि तिह तवइ जिह दिणयरु खयगालि ॥

हेम.-प्रा.व्या. IV.

५७ बप्पीहा ‘पित्र पित्र’ भणवि कित्तिउ रुअहि हयास ।
तुह जलि महु पुणु वल्लहइ बिहुँ बि न पूरिअ आस ॥

हेम.-प्रा.व्या. IV.

५८ चूडुलउ चुण्णीहोइसइ मुद्धि कवोलि निहितउ ।
सासानलजालझलकिकअउ बाहसलिलसंसितउ ॥

हेम.-प्रा.व्या. IV

५९ एकहिँ अकखहिँ सावणु अन्नहिँ भद्रवउ
माहउ महिअलसत्थरि गण्डत्थले सरउ ।
अंगिहिँ गिम्ह सुहच्छी-तिलवणि मगसिरु
तहें मुद्धए मुहपंकइ आवासिउ सिसिरु ॥ हेम.-प्रा.व्या. IV.

६० हियडा पहें एहु बोल्लअओ महु अगाइ सयवार ।
'फुट्टिसु पिएं पवसंति हउँ' भण्डय ढक्करि-सार ॥

हेम.-प्रा.व्या. IV.

⁶¹ “ Do burst, O heart, do not delay any more. Let me see where this wretched fate will transfer these hundred agonies from you.”

Like his girl, the Traveller too is equally miserable.

⁶² “ Everywhere, he looks, up, above, sideways or down on the ground, it is so painful to him.”

⁶³ “ A row of clouds overhead, while the beloved is far away; the furious cobra dangling on the head, while the anti-venom medicinal herb is (far away) on the Himālayas !”

⁶⁴ “ The clouds roaring and the lightning flashing, while I imagine my beloved lying restless in her misery with the elderly women, her face turned away from them, as she weeps silently.”

⁶⁵ “ I remember, when in my arms, she heard the loud thunder of clouds, she held me fast in fear and taking away her mouth from mine, she planted it on my neck. How can she suffer the massive array of clouds now, when parted from me ?”

६१ हिअडा फुट्टि तडति करि कालक्खेवे^० काइ ।

देक्खउँ हयविहि कहि ठबइ पइ विणु दुक्खसयाइ ॥

ह्रम.—प्रा.व्या. IV.

६२ उपरि घनं घनपटलं तिर्यग् गिरयोऽपि नर्तितम्यूरा: ।

क्षितिरपि कन्दलघवला दृष्टि पथिकः वव पातयतु ॥ सुभा.

६३ उपरि पथोधरमाला दूरे दियिता किमेतदापतितम् ।

हिमवति दिव्योषधयः कोपाविष्टः फणी शिरसि ॥ सुभा.

६४ रसति तरुणीकेशश्यामे पयोभृति निर्भरं

स्फुटति चपले वारंवारं क्षणद्युतितेजसि ।

उपगुरुजनं मन्ये दैन्यात् पराङ्मुखसुप्तया

निभृतनिभृतं मन्दोच्छ्वासं तथा बत रुद्यते ॥ सुभा.

६५ श्रुत्वा बालमृगीविलोलनयना शब्दं घनानां पुरा

भोत्या वक्षसि संश्रितापि निबिडं भूयः समालिङ्गति ।

या वक्त्रादपहृत्य रोपितवतो कण्ठे ममैवाननं

सा द्रक्ष्यत्यधुना कथं नु विरहे बाला पयोदावलोम् ॥ सुभा.

⁶⁶ “ Thus, when he sees the clouds perched on mountain-tops, the Traveller walks along weeping and crying, thinking to himself that they will have no pity on his beloved, when they are out to swallow big mountains !”

Such is the agony the poor Traveller suffers from in the rains and, as one poet has humorously remarked, he proved such a nuisance to the whole village, where he rested, by his loud piteous cries throughout the night that the villagers met in a meeting next morning to resolve that no traveller henceforth be given shelter in their village.⁶⁷

x x x x

With all these trials and tribulations of the journey, our poets have not failed to give to the Traveller some relaxation on the way for his pent-up emotions.^{67a} A girl for instance would invite him at midday to rest under the shade of a tree, with an amorous suggestion :

⁶⁸ “ Even the shadow is afraid to move out from the body in the hot sun. Why don’t you, therefore, O Traveller, rest here ?”

⁶⁹ A woman in the field amorously calls him to sleep in

६६ अबमा लगा डुंगुरिंहि, पहिउ रहतउ जाइ ।

जो एहा गिरिगलणमणु सो कि धणहें घणाइ ॥ हेम.-प्रा.व्या. IV.

६७ धीरं वारिधरस्य वारि किरतः श्रुत्वा निशीथे ध्वनिं

दीर्घोच्छ्वासमुदश्रुणा विरहिणीं बालां चिरं ध्यायता ।

अध्वन्येन विमुक्तकण्ठमखिलां रात्रि तथा क्रन्दितं

ग्रामीणः पुनरध्वगस्य वसतिर्पामे निषिद्धा यथा ॥ अमृ.

67-A Recognising this need, Kālidāsa gives to his Traveller-Cloud many a diversion on the way in the form of his beloved rivers like निर्विन्ध्या; cf.

निर्विन्ध्याया: पथि भव रसाभ्यन्तरः संनिपत्य । मेघदूत. I.

६८ थोअं पि ण णोसरई मज्जमण्हे उअ सरोरतललुकका ।

आअवभएण छाही वि पहिउ ता कि ण बीसमसि ॥ गा. स. I.49.

६९ ‘इह निचुलनिकुञ्जे वंशसंभारभाजि

स्वपिषि यदि महूर्तं पश्यसि क्षेत्रमेतत्’ ।

the bower for some time that he may have a view of her field from this spot.

Thirsty, he enters the water-place to observe the beautiful naughty girl employed to give free water to the travellers.

⁷⁰ He sits down to drink from his folded hands and as he eyes her, he spreads out his fingers while the girl too pours out a thin stream of water.

⁷¹ Then he cleverly leads her into conversation, to suggest what he wants, viz. a kiss from her lips. And the girl also is not then unresponsive. ⁷² She invites him to rest and assures him that she is alone there and although in her shyness she would not tell, the clever one knows what he should do, proper for the occasion.

In the evening he reaches a village and throws himself on the courtesy and kindness of a young lady of the house.

⁷³ She is not averse to welcome him, though through her slave girl she tells him that her house is empty as the master has gone away a long time. He should, therefore,

इति पथिकमकस्मान्मार्गं एवोपविष्टं

वदति तरुणकान्तं गोपिका साङ्खडगम् ॥ सुभा.

⁷⁰ यथोधर्वक्षः पिबत्यम्बु पथिको विरलाङ्गुलिः ।

तथा प्रपापालिकाऽपि धारां वितनुते तनुम् ॥ सुभा.

⁷¹ of 'कस्येयं तरुणं प्रपा' 'पथिक नः' 'किं पैषमस्यां' 'पयः'

'धेनूनामुत माहिषं' 'बधिर रे वारः' 'कथं मङ्गलः ।

सोमो वाऽथ शनैश्चरो' 'मृतमिदं' 'तत्तेऽधरे दृश्यते'

'श्रीमत्पान्थं विलाससुन्दरं सखे यद्रोचते तत्पिब' ॥ सुभा.

⁷² मध्याह्नेऽतिखरे निदाघसमये तापोऽध्वनो वर्तते

शीते कुञ्जतटे विचित्रविटपे भो पान्थं विश्रम्यताम् ।

एकाकी च भवानहं च तरुणी शून्या प्रपा वर्तते

लज्जेऽहं द्रुवती स्वयं च चतुरो जानासि कालोचितम् ॥ सुभा.

⁷³ 'शून्यं वेदम चिरायितो गृहपतिर्जाताधुना शवरी

स्थातुं नोचितमत्र गच्छ निभृतं लोकंरनालक्षितः' ।

इत्थं लोलदृशा हृथसावभिहितौ दासीमुखेनाध्वगः

स्थित्वा किञ्चिदिव 'क्व यामि रजनी प्राप्ते' त्युदीर्घं स्थितः ॥ सुभा.

quit unnoticed, as it would be improper for him to stay there at night. But he just stayed on protesting 'where could he go in the darkness of the night' !

A more direct reception awaits him in some other places in these words :—

⁷⁴ " You may not expect to come across anything but stones in this village. But, observing the uplifted Payodharas (clouds, breasts) , if you desire to stay here, you may do so."

⁷⁵ " I am here all alone, a frail young girl. The master has gone to a foreign land. Why do you request, therefore, for a stay at this house, O fool, since my poor mother-in-law is blind and deaf ?"

⁷⁶ " You hold books in your hand, O Traveller; you may stay, therefore, awhile. Tell me, are you a physician or an astrologer ? If a physician, then tell me what medicine will cure my mother-in-law of her blindness ? If an astrologer, then speak when my husband will return after his long journey ?"

⁷⁷ " My mother-in-law sleeps here. I would repose in this place, while all other servants sleep there. Observe well, O night-blind fellow, lest at night you may collapse in my bed."

७४ ग्रामेऽस्मिन् प्रस्तरप्राये न किञ्चित् पान्थं विद्यते ।

पयोधरोन्नति दृष्ट्वा वस्तुमिच्छसि चेद् वस ॥ सुभा.

७५ एकाकिनी यदबला तरुणी तथाऽहम् ।

अस्मद्गृहे गृहपतिश्च गतो विदेशो ।

कं याचसे तदिह वासमियं वराकी

इवश्रूममान्धवधिरा ननु मूढं पान्थ ॥ सुभा.

Or

वीक्षितुं न क्षमा इवश्रूः स्वामी दूरतरं गतः ।

अहमेकाकिनी बाला तवेह वसतिः कुतः ॥ सुभा.

७६ भो पान्थं पुस्तकधर क्षणमत्र तिष्ठ

वैद्योऽसि किं गणितशास्त्रविशारदोऽसि ।

केनौषधेन मम पश्यति भर्तुरस्मा

किं वाऽङ्गमिष्यति पतिः सुचिरप्रवासी ॥ सुभा.

७७ एत्थं णिमज्जइ अत्ता एत्थं अहं एत्थं परिअणो सअलो ।

पंथिअ रत्तीअंधअ मा महं सअणे णिमज्जिहसि ॥ गा. स. VII. 67

Early next morning he gets up as the cock crows, which is a signal⁷⁸ to the travellers, as to the thieves and paramours to get away.

He takes leave of his hostess while he says—⁷⁹ “Remember me, O moon-faced one, in your talks.” “That is possible,” she replies, “if God will grant me the power to recollect incidents of my past life.” Surprised, he asks, “What special power is required, my beloved, to remember things of this very life ?” “No !” She retorts, “My life is going away with you. There is no question of this same life any more ” !

In this way, she bids him farewell and chafing and weeping she goes to his room to clear the grass with which a bed was made for the Traveller⁸⁰ !

Incidentally, as he proceeds on his homeward journey, he meets travellers who have a message or a letter to give him from his people. The message reads :—

⁸¹ “ Even her hot-tempered, irascible mother-in-law was made to burst into tears when she observed how her daughter-in-law’s bangles from both her hands slipped away, as she bent down to bow at her feet.”

The letter from the girl reads :—⁸² “ Your heart is placed in mine, eyes fixed on your face, as if drawn in a picture. My

७८ चोराणे कामुआणे पामरपहिआणे कुक्कुडो वअइ ।

‘ रमह वहह वाह्यह ’ एथं तणुआए रअणी ॥ गा. स. VI. 98.

७९ ‘ स्मर्तव्या वयमिन्दुसुन्दरमुखि प्रस्तावतोऽपि त्वया ’

‘ स्यादेवं यदि नाथ दास्यति विधर्जातिस्मरत्वं मम ’ ।

‘ एकस्मिन्नपि जन्मनि प्रियतमे जातिस्मरत्वं कुतः ’

‘ प्राणाः पान्थ समं त्वयैव चलिताः कवाद्यापि जन्मकता ’ ॥ सुभा.

८० भण्डन्तीअ तणाइं सोन्तुं दिणाइं जाइं पहिअस्स ।

ताइं चेअ पहाए अज्जा आअड्डइ रुअन्ती ॥ गा. स. IV.79.

८१ अइकोवणा वि सासू रुआविआ गअवईअ सोण्हाए ।

पाअपडणोण्णआए दोसु वि गलिएसु बलएसु ॥ गा. स. V. 93.

८२ हिअं हिअए णिहिअं चित्तालिहिअव्व तुह मुहे दिट्ठी ।

आलिंगणरहिआइं णवरं खिज्जंति अंगाइं ॥ गा. स. V. 85.

limbs are aching, however, as they are left long without your embrace."

⁸³ "There is nothing lost by separation. His form is fixed in my eyes, the touch in my limbs and his words in my ears, while his heart is just here in my heart!"

⁸⁴ "Why ask about my welfare? You know that young mango tree at the door has put forth something very sinister at its top!"

⁸⁵ "You ask me to write! But what can I write in a letter, my friend, when the very first word 'Sotthi' cannot be completed. The pen slips away from the hold of trembling, perspiring fingers."

⁸⁶ "Bring my lord back to-day, although the cruel one had gone against my will. The fire may burn houses and yet we need the fire."

And when he asks them whether they saw her, they say:—

⁸⁷ "Yes, we saw the fair one, saw her with eyes fixed on the way you would take to come back, making her bodice wet with her tears while drying it with her hot sighs."

x x x x x x

The 'D' Day when he is expected home is coming nearer. This was the Day given by him of his arrival and the girl at home was counting the earlier days with her fingers or with the help of the lines drawn on the wall, each line representing one day that has passed.

⁸³ रुअं अच्छीसु ठिअं करिसो अंगेसु जंपिअं कणे ।

हिअं हिअए णिहिअं विओइअं कि त्थ देव्वेण ॥ गा. स. II. 93.

⁸⁴ खेम? कुत्तो खेम! जो सो खुज्जंबओ घरद्वारे ।

तस्स किल मत्थआओ को वि अणत्थो समुप्पणो ॥ गा. स. V. 99.

⁸⁵ बेविरसिणकरंगुलिपरिगगहव्वलिअलेहणीमग्गे ।

सोत्थिव्विअण समप्पइ पिअसहि लेहन्मि कि लिहमो ॥ गा. स. III. 44

⁸⁶ विप्पिअआरउ जइ वि पिउ तो वि तं आणहि अज्जु ।

अगिण दड्डा जइ वि घर तो तें अंगि कज्जु ॥ हेम.—प्रा. व्या. IV.

⁸⁷ पहिआ विट्ठो गोरडो दिट्ठो मगु णिअंत ।

अंसुसासेहि कंचुआ तितुब्बाण करंत ॥ हेम.—प्रा. व्या. IV.

⁸⁸ “ Counting the days he had given me for his journey, again and again, I find my fingers are bruised and shattered by the nails.”

⁸⁹ “ Her friends, however, are afraid that he may not come on the exact day appointed. They, therefore, wipe away stealthily two or three lines there on the wall.”

⁹⁰ “ I passed these days counting them on the fingers and toes of my hands and feet. With what can I count now ? Thus saying, the poor innocent girl starts weeping.”

She is now all excitement and full of longings and yearnings for her man when he joins her.

⁹¹ “ He will come and then I shall be angry with him, and then he will appease me.”

But the other girl has a different ambition. ⁹² “ If ever I shall get my man back, I shall do such wonderful things as were never done before. Like water vanishing into the pores of a new earthen pot, I'll merge in him with all my limbs.”

Soon she gets an indication of his coming. Her left eye begins to throb and twich. She flatters and fondles this eye, therefore, saying :—

⁹³ “ O my left eye, if at your throbbing, he will come to-day, then I'll close this right one for ever, and will observe my lord only with you always.”

⁸⁸ जे महु दिणा दिअहडा दइएं पवसन्नेण ।

ताण गणंतिएं अंगुलिउ जज्जरिआउ नहेण ॥ हेम.—प्रा.व्या. IV.

⁸⁹ ओहोदिअहागमसंकरीहिं सहिआहिं कुहुलिहिआओ ।

दो तिणि तहि विअ चोरिआएँ रेहा पुसिज्जंति ॥ गा.स. III.6.

⁹⁰ हत्थेसु य पाएसु य अंगुलिगणणाइ अइगआ दिअहा ।

एण्ह उण केण गणिज्जउ ति भणिउं रुअइ मुद्धा ॥ गा.स. IV.7.

⁹¹ ‘एसी पिउ रूसेसु हउँ, रुठ्ठी मझं अणुणेइ’ ।

पणिंव एइ मणोरहहं दुक्करु दइउ करेइ ॥ हेम.—प्रा.व्या. IV.

⁹² ‘जइ केवइं पावोसु पिउ अकिआ कुहु करीसु ।

पाणिउ नवइ सरावि जिवैं सव्वंगे पइसीसु ॥ हेम.—प्रा.व्या. IV.

⁹³ कुरिए बामच्छ तुए एहिइ सों पिओज्ज ता सुइरं ।

संमोलिउ दाहिणअं तुइ अवि एहं पलोइस्सं ॥ गा.स. II.37.

⁹⁴ “ For I will have no sleep when he joins me, as I had none in his absence. Both-ways, thus I pass sleepless nights.”

Now the news has gone round that he has come back and it has reached her ears. Her friends ask her to dress and decorate herself.

⁹⁵ “ Put on your bracelets and place a floral wreath in your hair. Wear a silken sari and your pearl-necklace. Draw creeper designs in musk on your checks. Do it quickly, my friend, the man of your heart comes this very morning.”

⁹⁶ In her hurry and excitement, however, she puts wrong things in wrong places. The collyrium she applies to her forehead, the lac-dye in the eyes and the black spot on the cheek !

⁹⁷ She feels too nervous to approach him and her friends have to goad her on.

⁹⁸ In fact, it was difficult for her to believe that he has really come back. ‘Even when he stood before her, she thought it to be an illusion. Even when he clasped her by the neck, she suspected it to be a dream.’

९४ पिअसंगमि कउ निहडी पिअहोँ परोक्खहोँ केम्ब ।

मइ बिशि वि विन्नासिआ, निह न एम्ब न तेम्ब ॥

हेम.—प्रा.व्या. IV.

९५ कलय बलयं धम्मिल्लेऽस्मिन् निवेशय मल्लिकां

रचय सिचयं मुक्ताहारं विभूषय सत्वरम् ।

मृगमदभवीपत्रालेपं कुरुष्व कपोलयोः

सहचरि समायातः प्रातः स ते हृदयप्रियः ॥ सुभा.

९६ श्रुत्वाऽस्यान्तं बहिः कान्तमसमाप्तविभूषया ।

भालेऽज्जनं दृशोलर्काः कपोले तिलकः कृतः ॥ सुभा.

९७ ‘धैर्यमाधाय लज्जां च व्यपनीय विलासिनम् ।

संभावयसि कि नैनं दिष्टच्छा स्वयमुपस्थितम्’ ॥ सुभा.

९८ ‘आयातो दयितस्तवेऽति सहसा न श्रद्धेभाषितं

सद्यः संमुखतां गतेऽपि सुमुखी भ्रान्तिं निजां मन्यते ।

कण्ठाश्लेषिभुजेऽपि शून्यहृदया स्वप्नान्तरं शङ्कते

प्रत्यावृत्तिमियं प्रियस्य कियता प्रत्येतु शातोदरी ॥ सुभा.

⁹⁹ “ She feels so joyful to hear that he has come. The separation with all its agonies has disappeared; not a speck of its dust, as it vanished, remained behind !”

¹⁰⁰ “Suddenly she sees him when she goes out into the court-yard to scare away the crows. From her hand, at this moment, half the bangles slipped away, while the other half snapped into bits by the hand's sudden fattening through joy !”

¹⁰¹ “She stands at the door to welcome him with joy, with tremulous eyes and uplifted breasts; a reception ceremonial has thus been easily arranged, as it were, with an auspicious garland of blue lotuses over two jars filled with water !”

¹⁰² “The bangles jingling on her hands addressed you words of welcome, while on your feet were cast blue lotuses in the form of her shy glances. Admission to you was permitted in her heart where at the ‘door’ was placed a pair of auspicious pitchers in the form of her breasts. Tell me, my lord, has she not done proper hospitality worthy of you as her guest ?”

¹⁰³ “When I stood at the door, the lovely one spread out her thighs and immediately closed them. She pulled out the veil over her head and cast down her eyes. She withheld

९९ पितु आइउ सुअ वत्तडी झुणि कन्नड़इ पट्टू ।

तहोँ विरहओ नासंतभहोँ धूलडिआ वि न दिट्टू ॥ हेम.—प्रा.व्या. IV.

१०० वायसु उहुवंतिअहे पितु दिट्ठू सहसति ।

अद्वा वलया महिहिँ गय अद्वा फुटू तडति ॥ हेम.—प्रा.व्या. IV.

१०१ अभ्युन्तस्तनयुगा तरलायतक्षी द्वारि स्थिता तदुपयानमहोत्सवाय ।

सा पूर्णकुम्भनवनोरजतोरणलक्संभारमङ्गलमयत्नकृतं विधत्ते ॥ सुभा.

१०२ किचित्कम्पितपाणिकङ्कणरवैः पृष्ठं ननु स्वागतं

द्वीडानभ्रमुखाब्जया चरणयोर्न्यस्ते च नेत्रोत्पले ।

द्वारस्थस्तनयुगमङ्गलघटे दत्तः प्रवेशो हृदि

स्वामिन् किं भवतोऽतिथेः समुचितं सख्याऽनयाऽनुष्ठितम् ॥ सुभा.

१०३ द्वारोपान्तनिरन्तरे भयि तथा सौन्दर्यसारश्रिया

प्रोल्लास्योरुयुगं परस्पररसमासकं समासादितम् ।

आनीतं पुरतः शिरोऽशुकमधः क्षिप्ते चले लोचने

वाचस्तच्चं निवारितं प्रसरणं संकोचिते दोलन्ते ॥ अमरु.

her speech as she folded her arms !”

Such was the delightful welcome he received at his home on the day of his arrival. As he observes her, he does not fail to notice the change in her physical condition. Lovingly, therefore, he inquires,

¹⁰¹ “ Why this emaciation of every part of your body ? Why this tremour and the pallor of your cheeks ? ” “ This is all natural ; ” said she and turned away to shed the tears that had gathered in her eyes.

¹⁰⁵ The day of his arrival was a veritable festival to her, thinking as she was, of the various things that she would do.

¹⁰⁶ She asks her friend as to who should be worshipped first by her ? Is it the one who indicated his coming viz. the crow or the one who brought him to the house viz. the camel ?

¹⁰⁷ And when the camel comes up bringing her man to the house, she first looks at him with grateful eyes full of tears and then going to the camel, wipes off with her skirt the dust from his mane, offering to him mouthfuls of palm shoots, Samī leaves and Karīra bits.

The day came to a close at long last, the day that seemed to go very slow and heavy for her, as she had cherished in her heart various longings and diverse forms of enjoyment during a tête-à-tête with her lord.

१०४ ‘ अङ्गानामतितानवं कथमिदं कम्पश्च कस्मात् कुतो

मुग्धे पाण्डुकपोलमानन् ’मिति प्राणेश्वरे पृच्छति ।

तन्या सर्वमिदं स्वभावजमिति व्याहृत्य पक्षमान्तर-

व्यापी बाष्पभरस्तया चलितया निःश्वस्य मुक्तोऽन्यतः ॥ सुभा.

१०५ सज्जितसकलशरीरा क्षणे क्षणे मनसि किमपि गणयन्ति ।

उत्सवमिव तं दिवसं मनुते मुग्धा प्रियागमने ॥ सुभा.

१०६ आगच्छन् सूचितो येन, येनानीतो गृहं प्रति ।

प्रथमं सखि कः पूज्यः किं काकः किं क्रमेलकः ॥ सुभा.

१०७ आयते दियिते मरस्थलभुवामुत्प्रेक्ष्य दुर्लङ्घ्यतां

गेहिन्या परितोषबाष्पकलिलामासज्य दृष्टि मुखे ।

दत्वा पोलु-शमी-करीरकवलं चेलाऽचलेनादरा-

दुम्भृष्टं करभस्य केसरसटाभाराप्रलग्नं रजः ॥ सुभा.

¹⁰⁸ But in the evening, there gathered round him all his 'stupid' servants to have a long talk with him. Feeling bored in the impatience of her love, she stood up with a hasty step shouting, "I am bitten, I am bitten" and started fluttering her silken sari which put out the burning lamp and dispersed the meeting !

x x x x

Such is the Ancient Traveller's picture which I could draw in all its various stages, from the beginning to the end, against the dark, dismal background of the difficulties and the dangers of his journey. Its colours are, no doubt, gorgeous, gaudy and sensuous. But for every thought and emotion described, there is the support and corroboration of a Sanskrit or Prākrit Poet. Their subtlety of thought, tenderness of feelings, minute observation and the flight of poetic Fancy really deserve to be admired and appreciated. And here too, one may notice that Sanskrit Poetry is rather sophisticated and conventional, relying more on an element of exaggeration and a twist in expression, while the Prākrit Poetry, like the village maiden, is forceful, fresh and direct in its lyrical approach to the subject.

At the end, I would only add that my purpose in this article has been a purely literary one, namely to portray one aspect of Ancient Indian travelling—the one which affects the normal domestic, and emotional life of individuals, as depicted by poets and dramatists. The subject has many other aspects and a study of the descriptions of travel could throw a great deal of light on the general, social and economic conditions of those times.

१०८ आयाते वयिते मनोरथशतैर्नीते कथंचिद् दिनं
 वैदग्ध्यापगमाज्जडे परिजने दीर्घा कथां कुर्वति ।
 दण्टास्मीत्यभिधाय सत्वरपदं व्याधूय चीनांशुकं
 तन्वङ्गया रतिकातरेण मनसा नीतः प्रदीपः शम्भु ॥ अमरु.

16

RANADE¹ AND HIS PHILOSOPHY OF MYSTICISM

By S. G. TULPULE

The late Professor R. D. Ranade occupies a place of honour among contemporary philosophic thinkers in India. Apart from his profound scholarship and critical acumen, he had the rare privilege of following in a spirit of dedication the object of his study. Always his first affection, philosophy with Ranade was the pursuit of wisdom, not a mere intellectual exercise. It was, in fact, for him a dedicated way of life. As Dr. Radhakrishnan once said, ‘Ranade lived philosophy and was touched by the Grace of God.’

Coming to philosophy by way of mathematics in which he obtained a ‘double first’ — Ranade made his mark initially as an exceptionally brilliant student. It is interesting to see, however, how the pendulum swung exactly to the other extreme in his case. In 1905, as an Undergraduate, he had a definite aversion for an abstract subject like Philosophy. This hostile attitude towards Philosophy was due, as he himself says, not to the subject itself but to the method of its teaching. Deep down, the impulse of philosophy was however strong,

¹. Born July 3. 1886. Jamkhandi. Graduated from Deccan College, Poona. 1908. Professor of Philosophy, Fergusson College, Poona, and Willingdon College, Sangli. 1914–1924. Professor of Philosophy. 1928–1946, and Acting Vice-Chancellor, 1946. Allahabad University. Celebration of Amrita-Mahotsava, 1956, Jamkhandi. Died June 6, 1957. Nimbal (Dist. Bijapur.)

and this is how he philosophised in a monadistic-spiritualistic vein after seeing a cricket match for about six hours on the College Grounds :

“ Where is the Centre of the Universe? I summarily answer, ‘ everywhere ! ’ Every particle of this infinite Universe is its Centre, or we had better say, hides its centre. The Centre is rather in the particles than the particles themselves. The particles may perish, but the centre does not. It is indestructible, imperishable; without end and without beginning...
..... The Universe is but an Infinite Circle, with its Centre everywhere and circumference nowhere! ”

—(Centre of the Universe, 1908).

This excerpt from one of his earliest writings clearly indicates that he began with a pluralistic conception of Spiritual Reality, the starting point from which his thought was to proceed in succeeding years. As he says, he was then under the spiritual influence of Carlyle and was philosophising after the manner of Teufelsdroeck. The early dislike for philosophy had now given place to keen interest in it and his love for the Sanskrit Language and his regard for one of its greatest Philosophers, Shankaracharya, made him undertake the study of Indian Philosophy. In October 1908, when Ranade happened to visit the Matha of Shankaracharya at Benaras, the devotional songs recited in the Math fell on his ears which made him ‘ pause and think how a so-called Advaita Philosopher could at the same time make room for devotion in his Philosophy.’ This incident impelled him to study Indian Philosophy all the more. Just at this time he suffered a physical breakdown in his health which again made his mind turn definitely spirit-ward. As a consequence, the problem of justifying his own spiritual experience in terms of philosophic thought became all the more insistent for him and he took to the study of European Philosophy with the intention of finding in Eastern and Western Philosophic thought a justification for spiritual life.

The subject of Mysticism seems to have attracted Ranade’s attention even in his earlier writings. In his admirable paper

on Herakleitos¹ (1916), for example, which left Shri Aurobindo Ghose 'charmed, enlightened and satisfied', he successfully refutes the views of no less a scholar than Pfleiderer who wishes us to look upon this Greek Philospher in the light of the idea of mysteries : 'im Lichte der Mysterien-idee.' While referring Herakleitos to the Scientific tradition rather than to the Mystical one, Ranade says :

'His only claim to a niche in the mystic shrine is his aphoristic, epigrammatic and cryptic style. But mere aphorism is not mysticism, and we may safely regard Herakleitos as even an antimystic, remembering what importance he attached to the dry light of reason.' (p. 4)

In another essay on 'Meditations on a Fire - Fly'², he speaks of man as an 'Igneous worm' who has the light within just as a fire-fly has the light without.

'We have the divine spark within us, as thou hast the phosphoric spark without. Our light, however, is permanent; thy light is transitory!' (p. 139).

Then again in his spirited defence of Indian Philosophy against a most unbalanced critic, Har Dayal, Ranade³ seems to take up the cause more of mysticism than of philosophy proper. For here, according to him, though he does not use the word *Mysticism*, the great truth of truths upon which stands or falls the philosophy of India is the speculation of the ancient sages regarding the realisation of the *Atman*. In fact, he attempts at a brilliant synthesis of philosophy and religion in this Essay, stating as his first premise that philosophy can always reach only a certain limit and that all philosophy is wordy :

"I believe that Philosophy without religion is like form without spirit, and that religion without Philosophy is like spirit which cannot work without a form. It is in the supreme combination of form and

¹ *Philosophical and Other Essays*, pp. 1-23.

² *Ibid*, pp. 134-139.

³ *Ibid*, pp. 165-184.

spirit, of Philosophy and Religion, that the true salvation of a nation consists." —(p. 177)

That is why he considers the so-called philosophers, who speak merely from intellectual conceptions and not from self-realisation, as inferior to a poor Nicodemus or to poor Chokha Mela, who, however humble in other ways, yet held communion with God.

For a fuller understanding of Ranade's Philosophy of Mysticism one has to turn to his major works commencing with 'A Constructive Survey of Upanisadic Philosophy' published in 1926 and aptly described as a 'monumentum aere perennius' by Garbc. Here Ranade constructively surveys 'that great huge ocean of blissful existence' depicted in Upanisadic Philosophy. The two chief purposes of this work are to put into the hands of the Orientalists a new method for treating the problems of Indian Philosophy and into the hands of European Philosophers new material for exercising their intellects on. But the ultimate purpose of this work is spiritual. To that end everything else has been made subservient. Time and oft have the Upanisads compelled spiritual admiration from all Orientalists, both European and Indian, and Ranade here tries to show how all the teachings of Upanisadic Philosophy converge towards the realisation of the mystical goal. The Upanisads supply the philosophic foundation upon which the Bhagavadgita later erected its theory of spiritual activism, and in either case the mystical motive has been predominant. The Upanisadic seers arrived at the conception of a unitary *Atman*, a conception which is the quintessence of the Philosophy of the Upanisads, and which enables us to bridge over the disputes between the various contending theological Schools. Not content with merely constructing an intellectual explanation of Reality, the Upanisads suggest, though indirectly, means for the practical attainment of it. Mystical experience is, no doubt, ineffable, and any attempt to give expression to it is bound to succeed only partially. Nevertheless, it has to be in some way communicated so as to enable the seekers after mystic life in their otherwise dark journey to know the lamp-posts on the

mystic way. It is these mystical intimations of the realisation of the Self, which are hidden like jewels beneath an intellectual exterior, that Ranade tries to bring out in the last chapter of this volume, which is devoted to 'Mysticism.' Here he first shows how the Upanisads distinguished between the lower (*apara*) and the higher (*para*) knowledge, as the Greek Philosophers did between Doxa and Episteme, between opinion and truth, and then proceeds to deal with problems like the qualifications for self-realisation, necessity of initiation by a Spiritual Teacher, precautions to be observed in imparting spiritual wisdom, meditation by means of 'Om' as the way to Realisation, the faculty of God-realisation, types of mystical experience, the effects of realisation, and the like, after Upanisads. He concludes by quoting a few mystic monologues containing the post-ecstatic utterances of the Upanisadic sages.

It is in the masterly Preface to his 'Mysticism in Maharashtra' (1933) that we get in a nut-shell Ranade's philosophy of Mysticism. In this volume, he surveys analytically the vast mystical literature produced by the great poet-saints of Maharashtra from the age of Jnanesvara, the Coryphaeus of the Bhakti movement, downwards to the age of Ramadasa. These mystics are classified here according to the different types of mysticism illustrated in them : Jnanesvara as the type of an intellectual mystic, Namadeva as the herald of democratic mysticism, Ekanatha as a typical example of the synthesis of worldly and spiritual life, Tukarama as representing personal mysticism and Ramadasa as the type of an active saint. The temperamental differences of these mystics, however, do not come in the way of their mysticism which is really one throughout. It is a mysticism which, unlike the mysticism of Bhagavadgita, rests upon itself, involving no aid from any philosophical construction whatsoever. As Ranade describes it, it was a 'practical devotional mysticism,' more of a way of life than mere philosophic speculation. It was also a mysticism which engrossed itself in the practical upliftment of humanity, irrespective of any philosophical questionings, and with even a strong bias against philosophical endeavour.

to reach the Absolute. Naturally, it was not reserved for a selected few, as in the Upanisadic period, but was democratised by its savants who came from the various walks of life. As the late Professor W. B. Patwardhan says while describing the democracy of the Bhakti School as represented in Namadeva and his contemporaries, "the gates of the Bhakti School were ever open. Whoever entered was hailed as a brother—nay, more—was honoured as a saint." For five successive centuries, Maharashtra was the abode of that noblest and truest of all democracies, the Democracy of the Bhakti School. It is this spiritual democracy which Ranade analyses descriptively in this work in the Introduction of which he supplies a very solid philosophical foundation to it, a foundation that can aptly be described as the Philosophy of Mysticism.

He begins with a definition of Mysticism and immediately proceeds to expound it. We cannot do better than quote from the original :

"Mysticism denotes that attitude of mind which involves a direct, immediate, first-hand, intuitive apprehension of God. When mysticism is understood in this sense, there is no reason why it should be taken to signify any occult or mysterious phenomena as is occasionally done..... Mysticism implies a silent enjoyment of God. The ineffable character of mystical experience is closely linked with its intuitional character. It has been very often supposed that for mystical experience no separate faculty like Intuition need be requisitioned, but that intellect, feeling and will might suffice to enable us to have a full experience of God..... Intuition would not deny to Mysticism a title to Philosophy if intellect requires it. As it connotes a determinative effort towards the acquisition of Reality, it implies a definite, prolonged and continuous exercise of the Will. Also, Mysticism necessarily makes place for Emotions in a truly mystical life..... Thus it seems that intelligence, will and feeling are all necessary in the case of Mystical endeavour : only Intuition

must back them all. It is this combined character of mystical experience, namely, its ineffable and intuitive character, which has served to make all God-aspiring humanity a common and hidden Society, the laws of which are known to themselves, if at all. We may even say that they are known only to God, and not even to them."

(Mysticism in Maharashtra, Preface, pp. 1—2.)

The Mystics of all ages and countries form an eternal Divine Society and there are no racial, communal or national prejudices among them. Time and space have nothing to do with the eternal and infinite character of their mystical experience. Hence, the mystics from Maharashtra form but a cross-section of that Divine Society, and yet represent the reality of the Mystic Assembly completely and to the fullest extent. Ranade, therefore, next proceeds to give a general comparison of the Maharashtra Mystics and the Mystics especially of the Christian world, comparing Jnaneshvara with Plotinus, Augustine and Eckhart, Chokha Mela, the pariah, with Bohme, the shoe-maker, Tukaram with Suso and Bunyan, and finally that activistic type of Maharashtra Mystic, Rama-dasa, with European mystics like Pythagoras, Ignatius Loyola and Ruysbroeck. These comparisons are made here with reference to topics like the vision of God, the identity of Self and God, the Ideal Sage, the Ugly Soul, the Sanctuary and the Statues, the value of the Name and the like, all coming under the general head of Mysticism. It is particularly interesting to note Ranade's comparison of the spiritual experiences of the Eastern and the Western Mystics which prove beyond all doubt that they are all one, reminding us of Herakleitos's saying that 'Those that are wakeful have one common world, those that are sleeping, each a different world.' Ranade next proceeds to consider some general problems in the psychology and philosophy of Mysticism, especially the problem of the 'Dark Night of the Soul,' called as such by St. John of the Cross, and the problem of Religious consciousness and Sexual consciousness, brought out again by the same mystic. How is it that these mystics come to regard the relationship

between the Self and God as on a par with the relationship between the bride and the bridegroom? Is it a morbid pathological condition where the mystics portray their otherwise unexpressed love of the sex? Or is it due to what Freud and Jung call the libido, which is at the root of every conative and creative activity? Is Schroeder right in supposing that the differential essence of religion is reducible only to sex ecstasy? Posing these questions, Ranade offers only one explanation to meet the mystic's sexual portrayal of his religious realisation, namely, the analogical explanation. As the author of the Brihadaranyakopanisad (IV. 3.21) tells us, the only earthly analogy which we can have for the bliss of God-realisation is the bliss arising from union with a dear wife. Even this analogy Ranade finds it difficult to accept. For he sees no justification whatsoever for the mystic's portrayal of the sexual element in mystical life. The only reply he has to offer to the so-called 'erotic' mysticism or *Madhura Bhakti* he offers in the following words of James, the psychologist : "Everything about the two things (Religion and Sex) differs : objects, moods, faculties and acts; and any general assimilation is simply impossible. In this sense, we may say that the religious life depends just as much upon the spleen, the pancreas and the kidneys, as on the sexual apparatus." (*Vide 'Varieties of Religious Experience'*, p. 12).

Ranade considers five different aspects of the criterion of the reality of Mystical experience, the first being its universality. There may be physical and temperamental differences among mystics, but there is no difference in the quality of their mystical realisation. It is this element of universality which, as Kant contends, would confer upon mystical experience objectivity, necessity and validity. The second aspect is the intellectual one. Accurate intellectual thought is a sure mark of real mystical experience. Here again there are temperamental differences. Not all mystics need be philosophers ; but wherever true mysticism is, intellectual power and absolute clarity of thought must be. It is certainly not without reason that great mystics like Shankaracharya, or Spinoza or Jnanesvara have pro-

duced great intellectual works that enjoy a certain immortality on account of their inner mystic fibre. The third aspect is the emotional aspect. As Ranade puts it, 'the life of emotions is a *sine qua non* of mystical experience. The mystical life, so far from being unemotional, is supremely emotional; only the emotions ought to be exercised and kept under control by intellect. In fact, no mystical experience is possible unless we have a plenitude of finer emotions, all turned to the experience of God.' The next criterion of the reality of mystical experience is its capacity for definite moral development of the individual and the Society. Mysticism does not tend, as is sometimes wrongly supposed, to a life of amorality or to a life of passivism. On the other hand, a true life of Mysticism teaches a full-fledged morality in the individual, and a life of absolute good to the Society. To the charge commonly levied against Mysticism that it is of little use to the Society, Ranade replies emphatically thus : " So far as the utility of the mystic to the Society is concerned, we may almost regard it as a truism of Mysticism that a Mystic who is not of supreme service to the Society is not a Mystic at all. It is true that...one mystic may choose to be of a quietistic, and another of an activistic type. But the fact remains that in either case he is of supreme value to mankind by calling their attention from moment to moment to the perception and greatness of God." (MM., Preface, p. 28) And finally, the surest criterion of Mystical experience is its validity as enjoyed by the mystic himself. This is the intuitional aspect of Mysticism, to which all other aspects are subservient. It is this personal aspect of a mystic's spiritual realisation which stamps it with a peculiar halo and worth. As Ranade says, " Before that, there is no appeal; for it, there is no criterion. A mystic's final judge is ultimately his own Self." (MM., Preface, p. 30.)

Ranade next attempts to present a developmental study of Mysticism in his recently published work, namely, ' Pathway to God in Hindi Literature.' Here he treats of the developmental aspect of Mysticism through select-pieces from Hindi mystics like Kabir, Suradasa, Tulsidasa, Mirabai,

Nanaka, Mahipati, Mansur and others. Ranade considers this aspect of Mystical life in five different stages : (1) Incentives to Spiritual life, (2) Necessity of Moral preparation, (3) Relation of God to Saints, (4) Beginnings of the pilgrimage, and (5) The Highest Ascent. As regards Incentives, he lays stress on points like human pursuit of illusion, universal blindness, the sleep of ignorance, contradictions of desert and fruit, deliverance from appearance and sin, the effects of old age, the ravages of death, and finally, the vanity of human life. These are some of the incentives, according to him, which prompt men to spiritual life. Next he considers the moral virtues that have to be cultivated for the realisation of such a spiritual life. The third stage in the development of mystic life is God in relation to the Saints, and Ranade considers it under the following heads :---

- (1) Proximity to God which means protection;
- (2) Personal autonomy under the suzerainty of Divine power;
- (3) Service which God renders to Saints;
- (4) Philosophical relationship between a Saint and God.

He then proceeds to a description of the actual path that leads to God-realisation and the means employed for reaching this end. The necessity of a Spiritual Teacher or Guru and constant meditation on the Name of God are the two means by which God-head can be reached. As regards the methodology of meditation, Ranade, following Kabir, emphasises the following five points : Internal meditation; intensive concentration; unending effort; constant remembrance; and lastly, spirit of devotion. This five-fold process of meditation transcends even Yoga and Absolutism, and backed by the inner spring of devotion, leads to an experience of the God-head. The last stage in the 'Pilgrim's Progress' is named by Ranade as the Highest Ascent comprising the culmination of spiritual experience and the post-ecstatic utterances of Mystics who have realised the Self. In order to attain such spiritual heights, a travail, the travail of unison, has to be experienced. But when a Mystic finally overcomes it, he experiences 'liberation, beatification and infinitude, which in different ways constitute

the spiritual Summum Bonum to be ever attained by man here below.

It is often said that philosophy is beset with subtleties and obscurantisms. Ranade, however, believed that 'the kernel of philosophy is not the difficulties or the obscurantisms, but a metaphysical and moral pith which constitutes the essence of all philosophy'. This aspect of philosophy is stressed by him in his Presidential Address delivered at the 13th Session of the Indian Philosophical Congress held at Nagpur in December 1937. The subject of this Address is 'A Philosophy of the Spirit' and it contains in a nutshell Ranade's philosophy of mysticism. Utilising the knowledge that the great researchers in the various departments of philosophic thought in the West have given us, he begins with a general survey of the recent discoveries in modern Physics, Biology and Neurology, and then proceeds to examine and synthesise the conclusions reached by scientists like Jeans, Driesch and Head. As regards Jeans's philosophical idealism and his idea of 'one continuous stream of life running through the whole of Nature,' Ranade prefers to go one step ahead and reach the 'theory of Spiritual Absolutism according to which the Spirit is immanent in the whole universe.' The autonomous principle of life he prefers to call 'Spiritoid' or 'Spiriton', coining a new word, instead of calling it a 'Psychoid' after Driesch, the biologist. The neurological discoveries made by Head, and especially his researches regarding the Thalamus as the seat of emotions, lead Ranade on to the problem concerning the conflict and co-operation, the inhibition and summation, of intellect and emotion, or of Jnana and Bhakti, and make him elaborate and establish perfect harmony between the two. Coming back to the ideals of non-violence and truth as preached by the ancient and modern sages like Vyasa and Mahatma Gandhi, Ranade goes on to suggest that these are 'merely the flowers of which the root is Spirit.' He has no doubt about the slogan of the day that universal brotherhood should be the foundation of our politics; but he wants this brotherhood to repose upon a spiritual basis. Thus, according to him, 'it is not by na

appeal to the dogmas of the different faiths that we can bring together the warring sects; but it is only by bringing them to a common consciousness of spiritual life that we can realize the end which we are striving for.' As he says elsewhere, the idea of 'one world' cannot be realised without realising the idea of 'one God.' As regards the philosopher in relation to the world at large, Ranade never entertained the idea that he cares only for his own peace of mind. For, according to him, the supreme duty of a philosopher is to bring about peace and harmony in the Society, the State, and the World at large.

Recently, Ranade was busy in revising and rewriting his lectures on the Bhagavadgita which he delivered to the Nagpur University in 1928. This work contains in essence his entire philosophy of mysticism. Selecting about fifteen eminent scholars of Gita, both Indian and European, he points out the insufficiencies and partial truths in their interpretations of Gita, as also the philosophical antinomies found in the Gita itself. The only way out of this labyrinth of thought is, according to Ranade, the Philosophy of God-realisation which is the central theme of Gita and which alone can build up a permanent structure on the edifice provided by its different interpreters of different times like Shankara, Auto, Bhandarkar, Tilak and Arobindo. Ranade's interpretation of the Gita, one feels certain, will be ranked as one of the finest contributions ever made to the vast and rich treasure of works on Gita.

Such, in brief, is Ranade's philosophy of mysticism. He was never a philosopher by profession, though a Professor of Philosophy he certainly was. His approach to the study of philosophy was a spiritual one and during the course of his life he developed and established certain concepts about the philosophy of spirit: that relativism failed at God; that Truth is one and its existence is only in God; that self-consciousness is not only possible but alone real; that the problem of self-realisation has ethical and mystical sides; that Intuition is the only faculty by which self-realisation can be attained; and, finally, that mystical experience has no meaning apart from moral development. He ultimately reached the 'endless end' of all philosophical thought, namely, the conception of

a unitary *Atman* who fills the whole world of nature as of mind, a conception which is the quintessence of Ranade's Philosophy. Unlike the professional philosophers, however, he had the unique fortune to live the mystical life that he conceived and his hope that the 'spiritual life which was the beginning of his philosophic career would be its culmination also'¹ came to be true in his very life-time. Not content with merely constructing an intellectual explanation of Reality, he also went forth to suggest means for the practical attainment of it. But in the very nature of things, the task of self-realisation did not admit of any deliberate and detailed exposition, and Ranade accordingly only throws hints and suggests the way of realising the Self, conscious of the fact that any description of the mystic experience by words would fall short of reality. For, he knew only too well that there is the same gulf between the expression of an experience and the enjoyment of it. Nevertheless, he has suggested his own mystical experience, though in a concealed fashion, so as to enable the seekers after mystic life in their otherwise dark journey to know the lamp-posts on the mystic way. It is thus that we find in his writings mystical intimations of the realisation of the Self, which are hidden like jewels beneath the philosophical exterior, and which, as he himself says about Upanishads, are of immeasurable value only to those who have an eye for them. It is in this sense that Ranade's Philosophy can aptly be described as the Philosophy of Mysticism.

Contemporary Indian Philosophy, 1952, p. 562.

17

CONTRIBUTION OF BUDDHISM TO LETTERS

P. L. VAIDYA

LITERARY achievements of the Buddhists cover a period of some 1500 years from 6th Century B. C. to about 10th Century A. D. Sporadic attempts to write in Pali language have been made even in later times, but they may be considered to be modern, and the objectives of the writers were not marked by any originality but by filling up deficiencies in relation to new trends in contemporary literatures particularly those in Sanskrit. I therefore propose to deal with those features of Buddhist Literature which would strike the scholar working on this early period of originality.

The contribution of Buddhism to the world of Letters is vast and varied. The languages used for original works are Pali, Sanskrit—classical and hybrid—as Edgerton would call it, Prakrit and Apabhramsa. For translations of these works almost all the languages of the countries where Buddhism travelled and prospered were used, and include Chinese, Khotanese, Mongolian, Tibetan, etc. A large portion of Buddhist literature in Sanskrit is lost in its original, but luckily a good portion is preserved in Tibetan and Chinese translations. It is quite clear that the reverence in which Buddha's religion was held in the countries has given an impetus to produce translations and thus preserve the original works from complete destruction.

Buddha was a native of Kapilavastu, a town not far away from the northern boundaries of modern U. P. and North Bihar. His mother-tongue must have been a language current in that region. Further, this language must have been a

language easily understandable in regions like Magadha, Mithila, Kasi and Kosala, and may not be far different from Sanskrit, the language of Vedic and Upanisadic people. Mahavira, a senior contemporary of Buddha and native of Vaisali preached his religion in the Ardhamagadhi language as the canonical literature of the Jainas says. This language, as the name implies, was a mixed dialect understood by people on the borders of Magadha and Mithila, Kasi and Kosala. The language of Buddha's preachings cannot be much different from this Ardhamagadhi. The Pail tradition records the name of Magadhi for the language of Buddha's sermons, though several features of classical Magadhi as described by later grammarians are not noticeable in Buddha's Magadhi, now known under the name Pali. It is difficult to believe that Buddha's Magadhi came from a distant place like Taksasila. In my view, there were only two main groups of languages current in Northern India in Buddha's time viz., Sanskrit and Prakrit. The latter had several local elements, described by grammarians as those of Sauraseni, Magadhi, Paisaci, Maharastri etc., but the Prakrit language as such was easily understood by ordinary and cultured men alike. The language of Asoka's Inscriptions is a pointer in this respect. The classical Pali is only a polished form of a language current in Asoka's time, which language must be styled as the language of Magadha, and not much difficult to understand in countries of Magadha, Mithila, Kasi and Kosala. This Magadhi of the age had several special features which are preserved in Pali, Buddhist Sanskrit and Apabhramsa works like Mahavastu, Suttanipata, Lalitavistara, Samadhiraja, Saddharmapundarika, Prakrit version of Dhammapada, the Mahayanasutras, and more specially or strikingly of the versified portions of these works. These features gradually became localised, and grammarians codified, magnified and stereotyped them as peculiar features of the language of a particular region. There must have been a vast activity behind the literature this age produced. Mixture of linguistic features was the order of the day.

Regarding the literature of the early age of Buddhism, there is one disquieting feature, viz., that it was not recorded or

reduced to writing immediately it was produced. It was handed down, like works of the Brahmanas, by oral tradition. The Pali canon was reduced to writing in Ceylon several centuries after the *parinirvana* of the Buddha. Buddha's preachings were directly addressed to his hearers and disciples; the disciples committed to memory their substance, not necessarily the actual wording. While these sermons were reduced to writing in Ceylon, some standardization might have taken place, yet the process must have preserved a good deal of the original form as well as language of the original sermon by Buddha. It is possible to compare the language of such sermons with those of his followers, e. g. Buddha's conversation with Ajatasatru as recorded in the Digha Nikaya No. 2 and that of his disciple Sariputta as recorded in Majjhima Nikaya No. 9. Such a comparison reveals how appealing the language and method of the Master was in dealing with a problem, while the disciple resorts to a lot of wrangling, logic, reference to authority. There are a few autobiographical passages in the Sutta Nipata, e. g. Padhana, Pabbajja and Nalaka Suttas, which stand out as strikingly genuine in comparison with the Mahapadana, Bodhirajakumara and even Ariyapariyesana, Suttas of the Digha and Majjhima Nikayas, where elements of myth and self-glorification become glaringly predominant. A thorough examination of the sermons of Buddha from this point of view is yet to be attempted. The present day Buddhists who accept everything in the Tripitaka as the direct and original words of the Master, may not relish the idea, though I feel sure that such an examination will heighten our reverence for the Master.

The feature of dialogue as against dialectics was in vogue from very early times, as for instance, in the dialogue between Uddalaka Aruni and Svetaketu in the Upanisads, but the Buddha used it par excellence and throughout his career as religious preacher. Mahavira also used this method of dialogue and conversation, but the canonical literature of the Jainas has preserved very few of his original dialogues. The conversational method of preaching seems to be at the back of the first part of the Acarangasutra of the Jainas, but it is couched in such

clumsy terms as to rule out a comparison with Buddha's dialogues. Dialogue, thus, constitutes the main characteristic of the early Buddhist literature in Pali and Sanskrit Suttas.

The use of narrative form to inculcate religious teaching is yet another feature of Buddhist literature. We have a vast and voluminous literature in Pali and Buddhist Sanskrit, particularly the Jatakas in Pali and Avadan as in Sanskrit. A very large portion of this form of literature relates to stories of the past lives of Buddha as Bodhisattva, and seems to be dominated by mythological, rather than historical elements. It is sometimes monotonous in the treatment of the subject-matter as well as form. But it contains not a few narratives which are universal, and find their counterpart not only in Indian literature, but even in world literature. It is likely that some of them may have travelled from India to the West, but the reverse process in the case of some cannot be completely ruled out. The agencies through which the stories usually pass from one country to another are the mariners and travellers who pick up everything striking from a place they visit, and on return propagate it in their country, often with a grain of salt! The use of the narrative to inculcate a religious doctrine is often resorted to, as it is most palatable, and swallowed without much effort. There are some books in this class, e. g., the Avadanasataka, which, in its present form, is as old as the first Century A. D., in which each story has the same introductory passage describing Buddha with all his standard epithets. There are a few set conclusions for the narratives. It appears that this collection was made for the use of monks for preaching. Works like the Divyavadana belonging to pre-classical period and Avadanakalpalata of Ksemendra of the post-classical period, have their specialities.

The Buddhist literature in its earlier phases is a literature for the masses; it has no literary embellishments, but its appeal, for this very reason, is enormous and powerful. Although the contents have no relation to ordinary life,—for they all relate to the propagation of religious thought,—they were easily understandable even by illiterates. A problem is set forth by a questioner to Buddha or any other similar dignitary, and it

is exhaustively dealt with by these persons drawing upon a number of illustrations and similes, mostly taken from ordinary life. Buddha, as is well-known, would not allow a questioner to draw him into a discussion on life beyond. He, in fact, refused to answer categorically certain questions, but, when drawn in to explain the fruits of ascetic life, he takes up a number of illustrations, and gradually points to king Ajatasatru that a person, on becoming a monk, not only receives from people here honour, respect, food and clothing which may be counted as worldly advantages for his following the life of an ascetic, but also attains spiritual evolution leading to peace of mind. It is in this way that Buddha preached and brought round the king to confess his sin of his having killed his father. The Mahayanasutras also follow a similar method in the dialogues.

Buddhist literature of the early period is marked by repetitions and synonymous expressions to such an extent as to become nauseating. Even an abridgement consciously attempted cannot completely eliminate the repetitions. It appears that the age, which did not much use written documents for want of writing material, had to depend upon memory for preservation of culture, and developed a literary style with set phrases and synonymous expressions as an aid to memory. The device of *peyalam* in Buddhist literature and *jave* or *Vannao* (*varnaka*) in Jain literature which is noticeable on almost every page, has for its basis this lack of writing material. Buddhaghosa in his *Samantapasadika* mentions the existence of a work called *Peyalasamgraha*, i. e., a collection of passages frequently used in books which are often abridged for convenience and brevity. We have not yet come across a work bearing the name *Peyalasamgraha* in Pali. The literature of the Jainas exhibits a similar tendency, and they also seem to have a work containing collection of such passages, though no longer extant. A work called *Varnaratnakara* of a Maithili scholar Jyotirisvara Kavisekharacarya in the old Maithili language of about 1325 A. D., containing standard descriptions and expressions useful for poets and bards, has come to light. This work must be regarded as a continuation of *Peyalasamgraha* of the Buddhists.

or Varnakasamgraha of the Jainas. It is needless to stress the importance of works of this type as an aid to memory.

The commentary literature of the Buddhists has made a distinct contribution to the world of letters. A good deal of it, particularly the old commentaries in the Singhalese language, which were available to Buddhaghosa in the fifth century A. D., seem to be completely lost, probably because the mediaeval Pali scholars like Buddhaghosa rendered their contents into Pali, as on their own statements, Pali was more widely known on the Indian continent than the Singhalese, the use of which was restricted to Ceylon only. To linguists these Singhalese commentaries of the early centuries of the Christian era would have been a very valuable treasure; but even the Pali renderings of these commentaries are of great cultural value. The popular conception of a commentary is that it only explains the wording of a text before the commentator. A cleverer commentator goes a bit beyond and offers some help to aesthetic appreciation of the work and its author. But the commentary literature in Pali, specially Buddhaghosa's commentaries on the Tripitaka, is a treasurehouse of information, not otherwise or elsewhere available. Buddhaghosa gives at the commencement of his commentaries a historical background of the formation of the collection going under the name Tripitaka. He gives a good deal of information about the personalities taking part in the collection. He, of course, explains the wording of the text, but even in this respect he marshals such a variety of authorities in support of his explanations that one is staggered at the wealth of originality as well as learning he exhibits. The lighter side of the commentary is numerous digressions and illustrations the volume of which is quite astonishing. In fact, the major portion of the Buddhist narratives is found incorporated in commentaries. These commentaries sometimes present useful summaries of contents where word-for-word explanation is not needed. We read hundreds of suttas dealing with Buddha, his walks and talks with monks, nuns, lay disciples, heretics, learned Brahmins etc. We however do not get a consolidated picture of his daily routine which he followed, and it is a matter of great delight to us to get it from Buddhaghosa in his commentary called

Sumangalnavilasini, where his routine is divided into five heads from morning to morning. Such flashes of pen are hardly noticeable in standard commentaries on Sanskrit works. About the narratives embodied in the commentary literature, I may mention the commentary on Dhammapada, where explanation of the text appears subordinate to narrative in proportion.

The life-spirit of Buddhist literature got dim and degenerated as time passed on. The conception of Buddhist Nirvana was based upon banishing the notion of Vitarka and Viacara. Day by day, the Vitarka and Vicara got an upper hand, and the idea of eschewing them was lost sight of; on the contrary, they dominated their literature and metaphysics. Logic played an important role, and the idea of refuting the views of the heretical schools dominated their intellectual urge. The result was that they got themselves divided into schools, and used the weapons they had forged to fight the heretics against their own brethren. It is a matter of some consolation and satisfaction that even in this branch they exhibited considerable originality. The vast literature of the dialogues of Buddha in Sanskrit and Pali required, like the literature of the Brahmanas and the Upanisads of the Vedic people, codification and systematisation. The sutra literature of the Brahmins, particularly those of Jaimini and Badarayana, attempted to systematise and codify the contents as well as controversies of the Brahmanas and the Upanisads. These two sutrakaras pre-suppose similar works among the Buddhists. Nagarjuna's *Madhyamakasastra* is an attempt to systematise the scattered teaching and apparent contradictions resulting therefrom in the Buddhist sutras and dialogues in Sanskrit and Pali. Instead of the compact sutra form in prose, Nagarjuna selected verse or karika in Anustubh metre, and other Buddhist writers like Aryadeva, Asanga, Vasubandhu and Dharmakirti followed him in this respect; but Dignaga used the prose form for sutras. Nagarjuna's *Madhyamakasatra* frequently makes reference to sutras like Katyayanavavada, which sutra, according to a commentator, is accepted as Buddhavacana by all the schools of Buddhists. In fact, this work is an attempt to codify the Buddhist teaching, at least as it was understood in the

school he himself founded. This work is an epoch-making work. It had a commentary by the author himself and also by Buddhpalita, Bhavya and Candrakirti, the last named commentator thinking that neither Buddhpalita nor Bhavya rightly interpreted Nagarjuna's karikas. Candrakirti's commentary is a masterpiece in the class of the philosophical literature of the Buddhists, and can be easily placed on par with Sankaracarya's *Bhasya* on *Badarayanasutras*. A similar attempt in Pali by Buddhaghosa produced another masterpiece of a slightly different kind, viz., the famous *Visuddhimagga* in prose which is an exposition of the Theravada doctrine of the Buddhists. There are several other works of this type, e.g., the *Abhidharmakosa* of Vasubandhu, and *Sutralankara* of Asanga, the former of which codifies the teaching according to Vaibhasika school of Kashmir, and the latter that of Yogacara school. Some of these works are written in a very terse language requiring a commentary which was soon supplied either by the author himself or by his immediate successor. Most of this literature belongs to a period ranging from 2nd to 8th century A.D., i.e., before the advent of Sankaracarya and perhaps before his Paramaguru, Gaudapadacarya, whose works have greatly influenced the shape and form of Hindu philosophical literature of the following centuries.

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